

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-01				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Reg. Review of Fluoride				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW Section 1.2					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						1,425				
Total:						1,425				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Melissa Simic <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 202-564-7722 FAX Number:				
Project Officer Name Ronald Coleman <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8491 FAX Number:				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Robert A. Knecht <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2043 FAX Number:				

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-01**

A. TITLE: Support for Regulatory Review of Fluoride

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER: Melissa Simic
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ALTERNATE WORK ASSIGNMENT MANAGER: Lili Wang
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D. BACKGROUND:

EPA published the current national primary drinking water regulation (NPDWR) for fluoride on April 2, 1986 (51 FR 11396). The NPDWR established a maximum contaminant level goal (MCLG) and an enforceable maximum contaminant level (MCL) of 4.0 mg/L. The MCLG and MCL of 4.0 mg/L were established to protect against the increased risk of crippling skeletal fluorosis. At the same time, EPA published a non-enforceable secondary maximum contaminant level (SMCL) for fluoride of 2.0 mg/L to protect against dental fluorosis, which was considered to be an adverse cosmetic effect.

The 1996 Safe Drinking Water Act (SDWA) Amendments require the U.S. Environmental Protection Agency to review existing NPDWRs not less than every six years. Any revisions shall maintain or provide greater protection of public health (SDWA section 1412(b)(9)). As a result of the first Six-Year Review of the fluoride NPDWR (67 FR 19030 (preliminary FR); 68 FR 42908 (final FR)), EPA requested that the National Research Council (NRC) of the National Academies of Science (NAS) conduct a review of the recent health and exposure data on orally ingested fluoride.

In 2006, the NRC published the results of their evaluation in a report entitled, *Fluoride in Drinking Water: A Scientific Review of EPA's Standards*. Based on its review, the NRC recommended that EPA update its fluoride risk assessment to include new data on health risks and better estimates of total exposure. The panel also recommended that EPA update its public health goal to be protective of severe dental fluorosis, clinical stage II skeletal fluorosis, and bone fractures, in addition to the stage III skeletal fluorosis that is addressed by the current public health goal.

EPA completed and published the results of its second Six-Year Review of NPDWRs (Six-Year Review 2) on March 29, 2010 (75 FR 15500). In March 2010 and as part of the second Six Year Review, the agency indicated that the Office of Water was in the process of developing its health and exposure assessments to address the NRC's recommendations. The agency finalized the risk and exposure assessments in January 2011 and announced its intent to review the drinking water regulations for fluoride as part of an off-cycle review. The agency is currently conducting an off-cycle review of fluoride to determine whether it is appropriate to revise the drinking water standard.

While the agency has performed a portion of the review internally, the purpose of this work assignment is to assist EPA in any additional tasks necessary for reviewing the fluoride drinking water standards and determining whether it is appropriate to revise the primary and secondary standards. The primary tasks of this WA include: (1) conducting a systematic literature review of the "Other Health Effects" for Fluoride, (2) developing additional technical support, technical analyses, and issue papers needed to support the review process and any potential regulatory revision and, (3) providing internal/external meeting support.

E. QUALITY ASSURANCE:

Task(s) 1 and 2 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under task(s) 0 of WA 0-01, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-01. The work plan shall explain that collection, use and analysis of data in this WA will be identical to the procedures described in the SQAPP completed under task 0 of WA_0-01. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP) accordingly.

Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via e-mail.

Deliverable(s): Work plan, monthly progress reports

Task 1: Systematic Literature Review of the “Other Health Effects” for Fluoride

EPA requested that the National Research Council (NRC) of the National Academies of Science (NAS) conduct a review of the recent health and exposure data on orally ingested fluoride which included the impact of fluoride on reproduction and development, neurotoxicity and behavior, the endocrine system, the gastrointestinal system, renal system, immune system, genotoxicity, cancer and other effects. NRC concluded that the available data were inadequate to determine if a risk for effects on these endpoints exists at an MCLG of 4 mg/L and made recommendations for additional research. The NRC report was published in 2006 and EPA has not performed a formal literature review since that time on the “other health effects” for fluoride. EPA has received many public comments regarding these “other health effects” and need the literature review to assist in responding to public comments received by EPA (i.e., the OW Fluoride Science Box) as well as completing the review.

The objective of this task is to conduct a comprehensive literature review of the “other health effects” of fluoride discussed in the 2006 NRC report and any additional health effects mentioned in the comments received from the OW Fluoride Science Box. The contractor has worked with and is familiar with the OW Fluoride Science Box per tasks completed in Contract: EP-C-07-22 Work Assignment: 4-35. The literature review does not need to include effects of fluoride on teeth (i.e., severe dental fluorosis, skeletal fluorosis, bone fractures). The contractor shall compile and analyze the literature available from peer-reviewed information. This task is a continuation of the work initiated under EP-C-12-023, WA 0-01.

Task 1.1: Using the deliverable from Task 1.1 (i.e., Final Methodology/Criteria Document) completed under EP-C-12-023, WA 0-01, the contractor shall conduct additional literature searches if needed and as directed by the EPA WAM. Under this task, the contractors shall continue to input the literature found during WA 0-01 into the draft ACCESS database also developed during WA 0-01.

Deliverable(s): Draft(s) and Final Literature ACCESS database, Draft and Final Bibliography/Abstract Document

Task 1.2: Using the deliverable created in Task 1.1, the contractor shall analyze the literature for each “other health effect” and create a list of research questions. For example, “What is the relationship between exposure to fluoride in drinking water and intelligence quotient (IQ) in children?” Then the contractor shall provide a summary of the literature, an overall conclusion statement, and ranking of the strength of supporting evidence to answer that research question. The EPA WAM provided two examples of documents to the contractor during WA 0-01 that will assist in completing this task.

In addition, the contractor shall use their expertise to further organize/update the comment/response document developed under EP-C-07-22 WA 4-35 and review the responses (developed by EPA WAM) to the comments received from the OW Fluoride Science Box.

Deliverable(s): Draft(s) and Final “Other Health Effect” Conclusion Document, Draft(s) and Final Comment/Response Document

Task 2: Technical Analyses, Issue Papers and Technical Support

Upon direction from the EPA WAM, the contractor shall collect information and/or perform additional preliminary analyses related to fluoride, including but not limited to: occurrence (i.e., Six Year 3 Information Collection Rule data), methods, treatment options, risk assessment, Environmental Justice, monitoring and reporting, additional regulatory options/revisions and cost-benefit.

Task 2.1: The contractor shall conduct 10-15 technical analyses and develop 3-5 issue papers or reports as requested through written technical direction by the EPA WAM. As identified by EPA, the technical analyses, issues papers or technical reports may be needed to support internal agency decision making during the review process or any potential revisions to the fluoride NPDWR. Technical support from the contractor may also include minor updates to the draft supporting documents that have been drafted for the fluoride review (e.g., Technology Design and Costs for Treating Fluoride-Contaminated Water and Occurrence & Treatment Technology Support Document).

Task 2.2: The contractor shall develop additions and/or make updates to the Preliminary R-Excel Fluoride Model, Model Documentation and User's Guide, and Summary Document developed in WA 4-35 and WA 5-35 as directed by EPA WAM. In addition, the contractor should note that technical support/analyses or model development associated with SafeWater CBX may be needed to support any potential revisions to the fluoride NPDWR. SafeWater CBX is the economic analysis model developed by Abt Associates for the EPA OGWDW to estimate the cost and benefits of drinking water regulations. It was developed under a separate work assignment with Abt Associates (EP-C-07-023, WA 4-20) under which the model is being prepared for several regulatory analyses that may include fluoride. The contractor will be able to download and have access to the model.

For planning purposes, the contractor shall assume the following: 1 to 2-page outlines; 5 to 10-page draft issue papers/reports; and 5 to 10-page summaries/analyses.

Deliverable(s): Draft Outline(s), Draft Issue Paper(s)/Report(s) or Summaries/Analyses and updates/additions to preliminary models

Task 3: Meeting Support

The contractor shall attend and prepare summaries of select internal or external fluoride meetings and/or other meetings related to the work being done under this work assignment. The EPA WAM will designate which meetings will require more detailed notes in technical direction. In addition to preparing meeting summaries, the contractor shall provide pre-meeting support such as preparing and distributing meeting agendas and meeting materials. The contractor shall review and evaluate all notes and presentations delivered to EPA to ensure accuracy and technical soundness.

For planning purposes, the contractor shall assume no more than 5 meetings and that all meetings will be in the Washington, DC area. The contractor shall provide at least one staff member to attend each meeting. All contractor staff shall be local to the Washington, DC area. When possible, the contractor(s) will be conferenced in by phone for the meetings. EPA does

not anticipate the contractor's support to any individual meeting or other event (conference, workshop, symposium, retreat, seminar or training) that may potentially incur \$23,000 in cost.

Deliverable(s): Meeting notes, summaries, agendas, materials

G. SCHEDULE OF DELIVERABLES:

Unless otherwise directed by the EPA WAM in writing, the contractor shall deliver all deliverables electronically.

Task	Deliverable	Due to EPA	Number of Copies/Medium
Task 0: Work Plan Preparation and Project Administration			
	Work plan	Per contract	
	Monthly progress report	Per contract	
Task 1: Systematic Literature Review of the "Other Health Effects" for Fluoride			
1.1	Draft Literature ACCESS Database	3 weeks after EPA WAM technical direction	1 - ACCESS
	Draft Literature ACCESS Database	2 weeks after EPA WAM's comments received	1 - ACCESS
	Final Literature ACCESS Database	2 weeks after EPA WAM's comments received	1 - ACCESS
	Draft Bibliography/Abstract Document	3 weeks after technical direction for EPA WAM	1 - Excel
	Final Bibliography/Abstract Document	1 week after EPA WAM's comments received	1 - Excel
1.2	Draft "Other Health Effect" Conclusion Document	1-2 months after completion of Task 1.1	1 - MS Word
	Draft "Other Health Effect" Conclusion Document	2 weeks after EPA WAM's comments received	1 - MS Word
	Final "Other Health Effect" Conclusion Document	2 weeks after EPA WAM's comments received	1 - MS Word
	Draft Comment/Response Document	3 weeks after technical direction from EPA WAM	1 - MS Word
	Draft Comment/Response Document	3 weeks after comments received from EPA WAM	1 - MS Word
	Final Comment/Response Document	2 weeks after EPA WAM's comments received	1 - MS Word
Task 2: Technical Analyses, Issue Papers and Technical Support			

Task	Deliverable	Due to EPA	Number of Copies/Medium
2.1	Up to 5 outlines	1 week after receiving written technical direction from EPA WAM	1 - MS Word
	Up to 5 issue papers as requested	2- 4 weeks after receiving written technical direction from EPA WAM	1 - MS Word
	Up to 15 technical analyses as requested	2-4 weeks after receiving written technical direction from EPA WAM	1 - MS Word/Excel
2.2	Preliminary Model additions and/or updates as requested	2 months after technical direction from EPA WAM	
Task 3: Meeting Support			
	Meeting agendas, meeting materials, meeting notes for no more than 5 meetings	Per WAM's written technical direction	

H. LEVEL OF EFFORT ESTIMATES: LOE – EPA estimates 1425 hrs to complete the tasks outlined

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

For work planning purposes, the contractor should assume 1-2 day trips to Washington, DC, during the period of performance. The purpose of this trip will be to coordinate with EPA staff regarding this work assignment. The contractor's travel shall be in accordance with EPA travel requirements and authorized in advance by the EPA Project Officer.

K. SPECIAL REPORTING REQUIREMENTS:

The contractor shall provide status updates for each task on a bi-weekly basis, either through the telephone or email. Also, the contractor shall provide budget updates ad hoc by phone or email.

J. QUALITY ASSURANCE SURVEILLANCE PLAN

Per Contract Requirements

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-02				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Endocrine Disruptor Screening				
Contractor CADMUS GROUP, INC., THE						Specify Section and paragraph of Contract SOW Sections 1.7. 2.4.1, 3.1.1, 3.2.1, 3.2.2, 4.1.5				
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:			LOE:					
11/01/2012 To 04/30/2014										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Hannah Holsinger							Branch/Mail Code:			
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Phone Number 202-564-0000			
							FAX Number:			
Project Officer Name Ronald Coleman							Branch/Mail Code:			
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Phone Number: 202-564-8491			
							FAX Number:			
Other Agency Official Name							Branch/Mail Code:			
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Phone Number:			
							FAX Number:			
Contracting Official Name Robert A. Knecht							Branch/Mail Code:			
<div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Phone Number: 513-487-2043			
							FAX Number:			

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-02**

A. TITLE: Technical Analysis and Support for Drinking Water Chemicals in the Endocrine Disruptor Screening Program

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER: Hannah Holsinger
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D. BACKGROUND:

EPA's authority for the Endocrine Disruptor Screening Program (EDSP) is based on several different Congressional actions, including the Federal Food Drug and Cosmetic Act (FFDCA), the Safe Drinking Water Act (SDWA), and the FY 2010 House Appropriations Committee report (H.R. 2996, H.Rept. 111-180) for EPA. EPA initially developed the Endocrine Disruptor Screening Program in response to a Congressional mandate of FFDCA "to determine whether certain substances may have an effect in humans that is similar to an effect produced by naturally occurring estrogen, or such effects as [EPA] may designate" (21 U.S.C. 346a(p)). As part of the EDSP, EPA issues orders to collect certain test data on listed chemical substances. The first EDSP list included 67 pesticides and was described in the April 15, 2009 issue of the Federal Register (74 FR 17579) (FRL-8399-7). Further information regarding EDSP and the requirements for Tier I (screening) and Tier II (testing) can be found on the agency's EDSP Web site, at <http://www.epa.gov/endo/>.

In 2009, EPA began working to expand the current EDSP beyond pesticides to include non-pesticide chemicals. As prompted by the H.R. 2996, for the first time in the history of the program, the agency used the SDWA authority to include chemicals or substances that may be found in sources of drinking water and to which a substantial population may be exposed. On November 17, 2010, EPA published the Second EDSP list along with the Supplemental Policies and Procedures and Information Collection Request documents related to SDWA chemicals. The Second EDSP list was a compilation of priority chemicals identified for Tier 1 (screening) either through the Office of Pesticide Programs (OPP) or Office of Water (OW).

The public was encouraged to submit relevant information and/or comments on the Second EDSP list during a 30 day comment period, which was extended an additional 30 days. The agency received approximately 55 comment letters. The agency is considering the comments received from the public and plans to refine the list as appropriate based on the analysis of these comments. The finalized list will be published along with the Schedule for Issuances of Orders.

The purpose of this work assignment is for Cadmus to continue work previously occurring under contract EP-C-07-022 and EP-C-12-023 for Task 1 and Task 2, specifically to obtain contractor support to assist with public comments received by the agency related to the Second EDSP list and to provide technical support in case the SDWA 1457 "findings" are challenged. This work assignment will allow for the continuation of work on the draft comment response document database. The purpose of this work assignment is also for Cadmus to provide contractor support in the analysis of drinking water contaminants for possible future EDSP lists.

E. QUALITY ASSURANCE:

Under this work assignment, Task 1 deals with the management of public comments. By nature of this Task, and as historically indicated through past public comment work under previous contracts, no PQAPP supplement is required for management and organization of these comments.

Tasks 2 and 3 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under tasks 2 and 3 of WA 0-02, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP)]. The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of

proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-02. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under tasks 2 and 3 of WA 0-02. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs` broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP] accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via e-mail.

Deliverables:

- 0.1 Work plan,
- 0.2 monthly progress reports

Task 1: Analysis of Public Information/Comments submitted in response to chemicals listed on Second EDSP list

This task supports the analysis and evaluation of public information and/or comments received on the Second EDSP list (Federal Register Notice Docket OPPT-2009-0477). The drinking water chemicals listed for the second EDSP list are either unregulated chemicals listed on Contaminant Candidate List 3 or regulated chemicals with a national primary drinking water standard; these are also referred to as the SDWA chemicals. The list also contains 28 pesticides that are priorities for Office of Pesticides Programs.

The contractor shall manage the comment-response (C/R) database (developed under Cadmus Work Assignment 3-33 of contract EP-C-07-022) and assist in revising the final response to comment document (Completed under Cadmus Work Assignment 0-02 of contract EP-C-12-023), if needed, using the sorted comments and the responses drafted by EPA and submit any revisions to the EPA WAM. The EPA WAM will review the revised C/R document and provide the contractor with any edits. After receiving edits the EPA WAM, the contractor shall incorporate the changes and submit a final C/R document that is section 508 compliant.

The contractor shall review and update the C/R database based on changes made during the development of the final C/R document including using direction provided by the EPA WAM. Cadmus will provide the updated C/R database to the EPA WAM upon completion of revising the database.

Deliverables:

- 1.1 Revised Final comment-response document (if needed)

- 1.2 Finalized comment-response document (if needed)
- 1.3 Updated Comment-response database

Task 2: Technical Analysis for public challenges to EDSP SDWA “Findings”

SDWA section 1457 authorizes the Administrator to provide for testing under the EDSP for any substance that may be found in sources of drinking water and to which a substantial population may be exposed. If the agency is judicially challenged that it has not adequately made this determination or these “findings,” the contractor shall provide technical analysis and documentation to support the agency in its defense. The EPA WAM will provide specific details of needed analysis and/or support documentation via written technical direction, including (if directed by the EPA WAM) updating deliverables previously developed by the contractor under Work Assignments 3-33, 4-33, and 5-33 of EP-C-07-022 and Work Assignment 0-02 of EP-C-12-023.

Deliverables:

- 2.1 Draft Technical Analysis/Revised Technical Analysis if directed by the EPA WAM
- 2.2 Final Technical Analysis

Task 3: Analysis of Chemicals for a Possible Future EDSP Lists

This task supports the analysis and evaluation of information on the possible EDSP future lists that contain drinking water contaminants in the event future EDSP lists occur during the scope of this contract. The drinking water chemicals, either unregulated chemicals listed on Contaminant Candidate List 3 universe or regulated chemicals with a national primary drinking water standard (also referred to as the SDWA chemicals), are included in the EDSP universe and therefore may be included on future EDSP lists. The contractor shall perform chemical analysis which may include (but are not limited to) creating/updating information sheets and occurrence information for drinking water chemicals involved in the EDSP program. The EPA WAM will review the draft deliverables and provide review comments to the contractor for incorporation into a final version.

Deliverables:

- 3.1 Draft EDSP Chemical Analysis
- 3.2 Final EDSP Chemical Analysis

G. SCHEDULE OF DELIVERABLES:

The contractor shall deliver all draft final and final documents as unbound hard copy and in Office of Ground Water and Drinking Water (OGWDW) compatible software. Unless otherwise requested by the EPA WAM in writing, the contractor shall deliver all other products electronically. All due dates below are calendar days, weeks, or months unless otherwise noted.

Task	Deliverables ¹ / Task Description	Deadlines
Task 0 - Work Plan and Monthly Progress Reports		

Task	Deliverables ¹ / Task Description	Deadlines
	0.1 Work plan 0.2 Progress Reports and Financial Reports	Per Contract
Task 1 - Analysis of Public Information/Comments submitted in response to chemicals listed on Second EDSP list		
	1.1 Revised Final comment-response document 1.2 Finalized comment-response document (require section 508 compliance)	Per technical direction
	1.3 Comment-Response Database	Per technical direction
Task 2 - Technical Analysis for public challenges to EDSP SDWA "Findings"		
	2.1 Draft Technical Analysis/Revised Technical Analysis	Per technical direction
	2.2 Final Technical Analysis	Within 2 weeks after receiving comments from the EPA WAM
Task 3 - Analysis of Chemicals for a Possible Future EDSP Lists		
	3.1 Draft EDSP Chemical Analysis	Per technical direction
	3.2 Final EDSP Chemical Analysis	Within 2 weeks after receiving comments from the EPA WAM

H. LEVEL OF EFFORT ESTIMATES:

EPA estimates that 230 hours will be required to complete the outlined tasks.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

K. SPECIAL REPORTING REQUIREMENTS:

L. QUALITY ASSURANCE SURVEILLANCE PLAN: Per Contract requirements

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-03				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Total Coliform Rule Support				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW Section 2.5					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE: 0						
11/01/2012 To 04/30/2014										
This Action:				1,052						
Total:				1,052						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Sean Conley <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Branch/Mail Code: Phone Number 202-564-1781 FAX Number:			
Project Officer Name Ronald Coleman <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-8491 FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Noelle Mills <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2171 FAX Number:			

**Performance Work Statement
EPA Contract No. EP-C-12-023 (The Cadmus Group)
Work Assignment 1-03**

A. TITLE: Support for Consideration of Storage Facility Inspection Requirements and Implementation of the Revised Total Coliform Rule

B. PERIOD OF PERFORMANCE: May 1, 2013 through April 31, 2014

C. WORK ASSIGNMENT MANAGER: Sean Conley
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ALT. WORK ASSIGNMENT MGR: Julie Javier
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D. BACKGROUND INFORMATION:

EPA published the Revisions to the Total Coliform Rule (RTCR) on February 13, 2013 to better protect public health against drinking water microbial contaminants. The RTCR is consistent with the recommendations made by the Total Coliform Rule Distribution System Advisory Committee, the Federal Advisory Committee convened by EPA to provide recommendations on revising the rule.

Based on comments and information EPA received during the comment period for the proposed RTCR, the Agency is considering the need for inspection requirements for finished water storage facilities that could help mitigate potential public health risks where water systems do not inspect their facilities as recommended by industry guidance. EPA is in the process of gathering information regarding storage facility inspection and cleaning and possibly proposing Storage Facility Inspection (SFI) requirements as an amendment to the final RTCR. A draft SFI proposal was developed to accompany the final RTCR but did not proceed to the United States Office of Management and Budget (OMB) for interagency review, pending additional information collection and outreach efforts. The proposed requirements could be published by fall 2013.

The revision process complies with EPA's Action Development Process which includes procedures for complying with Executive Orders, Safe Drinking Water Act (SDWA) statutory requirements and OMB circulars. SDWA Sec. 1412(b)(3)(C) requires EPA to prepare Health Risk Reduction Cost Analyses (also known as the Economic Analysis, or EA) that must include consideration of the following for each regulatory alternative: quantifiable and nonquantifiable health risk reduction benefits, quantifiable and nonquantifiable health risk reduction benefits from reducing co-occurrence of contaminants, quantifiable and nonquantifiable costs, incremental costs and benefits, effects of increased health risks, and uncertainties in the analysis of any of these elements. To comply with these requirements, EPA evaluates cost and benefit estimates of the potential regulatory alternatives against baseline conditions. Incremental costs and benefits are analyzed through an evaluation of successively more stringent regulatory alternatives. Details of how the requirements have been addressed are then included in the economic analyses and preambles to the proposed and final rules. EPA prepares economic analyses for rulemakings that comply with OMB guidelines (Circular A-4) and examine alternative approaches.

As part of the regulatory development process, EPA must also prepare an Information Collection Request (ICR) which describes the reporting, recordkeeping, survey, or other information collection requirements imposed by EPA on the regulated and other affected entities (i.e., public water systems, States and other primacy agencies).

A draft cost analysis and draft ICR were prepared to accompany the proposed SFI requirements under work assignments under the previous contract. The cost analysis and ICR will be revised under this work assignment, as necessary, to accompany the proposed SFI requirements when published, as described in the following sections.

EPA also develops new guidance documents or revises existing ones to help public water systems, States, and primacy agencies comply with a final rule. The contractor shall finish work to update the Ground Water Rule Sanitary Survey Guidance Manual to be consistent with the final RTCR requirements. EPA will also determine necessary guidance document development or revision for the proposed SFI requirements as it proceeds through the information collection and stakeholder outreach process while developing the proposed SFI rule.

EPA is also required to respond to significant comments received from the public during the public comment period for the proposed SFI rule. This work assignment includes tasks needed to develop the database used to organize the comments and document the responses to them.

E. QUALITY ASSURANCE

Tasks 1, 3, 4 and 6 in this work assignment may require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the

Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under tasks 1, 2, 3, 4, 7 and 8 of WA 0-03, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION

This work assignment provides support of information collection and stakeholder outreach concerning storage facilities, and development of documents in support of possible proposed SFI requirements. This work assignment also completes work to update the Ground Water Rule Sanitary Survey Guidance Manual to be consistent with the final RTCR requirements. This work assignment is a continuation of work conducted under a previous contract and previous work assignments.

Task 0: Work Plan, Monthly Progress Reporting and Quality Assurance

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-03. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under tasks 1, 2, 3, 4, 7 and 8 of WA 0-03. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs` broken out by the tasks in this WA. The contractor shall immediately notify the Project Officer and EPA work assignment manager (WAM) if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level QAPP accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via e-mail.

EPA projects that approximately 14% of the total LOE will be required to complete this task.

Deliverables:

- Work plan, including schedule(s), staffing plan and LOE estimates
- SQAPP revisions, as needed
- Monthly progress and financial reports
- Weekly or biweekly telephone or email status reports, if directed by the WAM

Task 1: Provide Administrative, Analytical, Writing Support

As directed by the WAM, the contractor shall provide administrative, analytical, and writing support to help EPA fulfill its obligations regarding consultations, outreach, and other tasks as determined by EPA. The contractor shall provide general support as identified by EPA including: developing fact sheets, presentation materials and visual aids, communication materials, and support documents; providing technical and copy editing services; supporting EPA docket management activities; and conducting literature searches and telephone inquiries. Technical and copy editing includes reviewing documents for technical accuracy, responding to all comments received from EPA (by incorporating changes into the document, or explaining why no action was taken) and ensuring consistency throughout documents.

EPA projects that approximately 5% of the total LOE will be required to complete this task.

Deliverables:

- Consultation and outreach fact sheets, presentation materials and visual aids, communication materials and support documents and analyses, as directed by the WAM
- Additional interim drafts of any of the above documents, as directed by the WAM
- Technical and copy editing reviews of documents, as identified by EPA
- Up to two literature search summaries, as identified by EPA

Task 2: Support for Public Meetings and Stakeholder Involvement

The contractor shall provide logistical and facilitation support for up to three public meetings, possibly including a web based meeting, to discuss information related to storage facilities and possible proposed SFI requirements. The public meetings shall take place at EPA Headquarters in Washington, DC and possibly in at least one other location outside of it. As directed by the WAM, the contractor shall assist with meeting activities including but not limited to development of FR notices, presentations, fact sheets, and hand-outs; identification of meeting rooms and facilities and online meeting resources; presentation of sessions; facilitation; and note-taking and completion of meeting minutes for the record.

EPA projects that approximately 18% of the total LOE will be required to complete this task.

Deliverables

- Interim draft(s) and final versions of FR notices, presentations, fact sheets, and hand-outs, as specified in technical direction from EPA WAM
- Minutes from all meetings

Task 3: Prepare the Economic Analysis (EA) for the proposed addition of Storage Facility Inspection (SFI) requirements to the RTCR

The EA includes an analysis of the number and types of finished water storage facilities operated by public water systems by system size and type, analysis of the frequency and costs of storage facility inspection and cleaning, characterization of national health risks associated with failure to inspect and clean storage facilities on a regular basis (every three to five years), and an analysis of the national costs and benefits for inspection and cleaning requirements.

This task will continue work that began during work assignments under previous contract work assignments. Under the previous work assignments, EPA tasked the contractor to develop the draft cost analysis for the SFI requirements. Under this work assignment, the contractor shall support EPA's development of a more complete EA for the proposed storage facility inspection and cleaning requirements, including gathering additional information regarding storage facilities and inspection and cleaning practices and revising cost projections consistent with the Technology and Cost Document for the final RTCR, and any updates to that cost information, and according to the technical direction from the WAM. The contractor shall also utilize revenue estimates completed for the determination of significant economic impact on a substantial number of small entities (SISNOSE) for the final RTCR and collect information and conduct analyses as directed by the WAM so that EPA can make the SISNOSE determination for the proposed SFI requirements. EPA shall review drafts and estimates and provide comments to the contractor as necessary. Afterwards, the contractor shall prepare the EA for public release to accompany the proposed SFI requirements.

Under this work assignment, the contractor shall continue to work on the EA by revising it based on comments received during the interagency (OMB) review and during the public comment period, according to the technical directions from the WAM.

It may also be necessary for the contractor to make changes to the EA as a result of any updates to the quality assurance process (e.g., changes to the data quality report). The contractor shall make all such changes according to the directions from the WAM. The final EA shall be 508 compliant as described in Task 0.

EPA projects that approximately 28% of the total LOE will be required to complete this task.

Deliverables:

- Interim draft(s) of Economic Analysis for the Storage Facility Inspection Requirements: Proposed Rule that address comments provided by the EPA WAM and changes made

through the quality assurance process, as necessary.

- Final Economic Analyses for the Storage Facility Inspection Requirements: Proposed Rule, in a version that achieves the level of 508 compliance specified by the WAM

Task 4: Prepare the Information Collection Request (ICR) for the Storage Facility Inspection (SFI) requirements

The ICR for proposed SFI requirements provides an overview of the information collection during the first three years after rule promulgation, and estimates the cost and time for the public to respond. An ICR is a set of documents that describe reporting, record keeping, survey, or other information collection requirements imposed on the public by the EPA or any other federal agency. Each request must be sent to and approved by OMB before a collection begins. This ICR should:

1. Describe the information to be collected,
2. Give the reason the information is needed, and
3. Estimate the time and cost required by public water systems and states to collect data and information as a result of the SFI requirements.

The contractor shall develop the required documentation that meets the above three objectives. The contractor shall develop the text of the draft ICR in accordance with the April 2005 version (or a more recent version if it is available) of *EPA's Guide to Writing Information Collection Requests Under the Paperwork Reduction Act (PRA) of 1995*. The contractor shall develop the EA in Task 3 such that it provides estimates and costs to be exhibited in the draft ICR.

This task will continue work that began during a previous contract work assignment. After reviewing the ICR, OMB may approve or disapprove the ICR. Alternatively, OMB may create conditions that must be met before the ICR is approved. The contractor shall revise the draft ICR to address comments from OMB as directed by the WAM.

EPA projects that approximately 5% of the total LOE will be required to complete this task.

Deliverables:

- Interim and final drafts of the ICR for SFI that address comments received during interoffice and interagency review, as directed by the WAM

Task 5: Response to Public Comment

Task 5.1: Propose and implement a system to manage public comments and responses

Upon publication of the proposed SFI requirements, EPA anticipates receiving public comment on the proposal. The contractor shall prepare for receipt of public comments and shall propose

and implement a system to organize and manage public comments and generate the Storage Facility Inspection Requirements: Response to Public Comment Document. The contractor shall propose the approach for organizing, managing, and responding to public comments before expending effort on development of system.

The system proposed and implemented shall allow EPA to easily respond to individual comments and refer to responses. Comments should be searchable by unique code, letter ID, commenter name, commenter organization, letter number, comment number, date received and other fields identified by the contractor or specified by the WAM. Attachments received with comments and exhibits included in comments should also be readily accessible.

As deemed necessary by the WAM, the contractor shall support EPA in responding to technical comments as identified by the WAM. The contractor shall use existing documents such as the EA and the SFI preamble to develop responses and shall provide EPA with draft responses as directed by the WAM. The contractor shall also enter draft responses into the comment response database system as directed by the WAM.

Task 5.2: Produce response to public comment document

Using the responses to comments that have been entered into the database system, the contractor shall produce a Storage Facility Inspection Requirements: Response to Public Comment Document that organizes and displays the comments in a coherent and meaningful order. The contractor shall submit draft and final versions as requested by EPA. The final version of the document shall be 508 compliant as described in Task 0.

EPA projects that approximately 18% of the total LOE will be required to complete this task.

Deliverables

- A database system for organizing, managing, and responding to public comments
- Draft responses to public comments, as requested by the EPA WAM
- Up to two interim draft(s) of Storage Facility Inspection Requirements: Response to Public Comment Document
- Final Storage Facility Inspection Requirements: Response to Public Comment Document

Task 6: Update the Ground Water Rule Sanitary Survey Guidance Manual

The contractor shall update the Ground Water Rule Sanitary Survey Guidance Manual to be consistent with the final RTCR requirements. The contractor shall make changes to the guidance manual based on technical direction of the WAM and on comments received during the public review period.

This task will continue work that began during a previous contract work assignment. Under the

previous work assignment, the contractor completed an initial draft of revisions to the guidance manual. Further development of the revised guidance manual shall occur on a schedule provided by the WAM. The cost estimate should be based on at least two additional draft documents and one final document (second draft based on EPA review of first draft already submitted; draft final for public comment; and final document addressing public comment). Development of the guidance document may also require additional interim drafts.

EPA projects that approximately 12% of the total LOE will be required to complete this task

Deliverables:

- Two additional drafts of the updated Ground Water Rule Sanitary Survey Guidance Manual
- Final draft addressing public comment on the updated Ground Water Rule Sanitary Survey Guidance Manual, in a version that is 508 compliant as described in Task 0.

G. SCHEDULE OF DELIVERABLES

Task	Deliverable	Due to EPA	No. of Copies/Medium
0	Workplan, schedule, staffing plan and LOE estimates for each task	In accordance with contract requirements	In accordance with contract requirements
0	Supplemental Quality Assurance Project Plan, if needed	Within 10 days of work assignment issuance	Electronic copy to the EPA WAM, Project Officer and Contracting Officer.
0	Monthly progress and financial reports	In accordance with contract requirements	In accordance with contract requirements
0	Weekly or Biweekly telephone or email status reports	Weekly/Biweekly each month; starting on the first week of the WA	1 electronic copy, as applicable
1	Support documents and analyses	As directed by the WAM	Electronic copies as requested by the WAM
1	Interim draft versions of support documents and analyses	Within 5 business days of WAM providing comments on the initial draft(s)	Electronic copies as requested by the WAM
1	Technical and copy editing reviews	As directed by the WAM	Electronic copies as requested by the WAM
1	Consultation and outreach fact sheets	Within 10 business days of WAM identifying specific content	Electronic/hard copies as requested by the WAM

1	Interim draft versions of consultation and outreach fact sheets	Within 5 business days of the WAM providing comments on the initial draft(s)	Electronic copies as requested by the WAM
1	Literature search summaries	Within 5 business days of the WAM directing contractor	Electronic copies as requested by the WAM
1	Presentation materials and visual aids	Within 10 business days of the WAM directing the contractor to start working on the presentation(s)	Electronic/hard copies as requested by the WAM
1	Interim draft versions of presentation materials and visual aids	Within 5 business days of the WAM providing directing the contractor to start working on the presentation(s)	Electronic copies as requested by the WAM
1	Communications materials	Within 10 business days of the WAM directing the contractor to start working on the presentation(s)	Electronic/hard copies as requested by the WAM
1	Interim draft versions of communications materials	Within 5 business days of the WAM providing directing the contractor to start working on the presentation(s)	Electronic copies as requested by the WAM
2	Interim draft(s) and final versions of FR notice, presentations, fact sheets, and hand-outs	Within 15 business days of the WAM providing comments to the contractor	Electronic copies as requested by the WAM
2	Meeting minutes	Within 1 week of end of public meeting.	Electronic copies as requested by the WAM
3	Interim draft(s) of EA for SFI requirements that address comments from the WAM and changes made through the quality assurance process	Within 30 business days of the WAM providing comments to the contractor	Electronic copies as requested by WAM
3	Final EA for the Proposed SFI Requirements	Within 15 business days of the WAM providing comments to the contractor	Electronic copies (MS Word and pdf) as requested by WAM
4	Interim and final drafts of the Information Collection Request (ICR) for SFI that addresses comments received during the interagency review and during the public comment period	Within 20 business days of the WAM providing comments to the contractor	Electronic copies as requested by WAM
5	System for managing RTCR public comments and responses	As specified in technical direction from the WAM	Electronic copies as requested by the WAM
5	Draft responses to public comments	As specified in technical direction from the WAM	Electronic copies as requested by the WAM
5	Interim draft(s) of Storage Facility Inspection Requirements: Response to Public Comment Document	As specified in technical direction from the WAM	Electronic copies as requested by the WAM
5	Final Storage Facility Inspection Requirements: Response to Public Comment Document	As specified in technical direction from the WAM	Electronic copies as requested by the WAM
6	Interim draft(s) of the updated Ground Water Rule Sanitary Survey Guidance Manual	Within 15 business days of the WAM providing comments to the contractor	Electronic copies as requested by the WAM

6	Final draft addressing public comment of the updated Ground Water Rule Sanitary Survey Guidance Manual	Within 15 business days of the WAM providing comments to the contractor	Electronic copies as requested by the WAM
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H. LEVEL OF EFFORT ESTIMATES

EPA estimates 1,052 hours will be required to complete this work assignment.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and WAM of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

Only local travel is expected from the contractor to support the work outlined in this work assignment.

K. SPECIAL REPORTING REQUIREMENTS

As described in Task 0, the contractor shall provide status updates for each task on a weekly or bi-weekly basis, either through a meeting with the WAM or over the telephone or email.

L. QUALITY ASSURANCE SURVEILLANCE PLAN

The performance measures contained in the general contract requirements will apply to work under this work assignment.

Work Assignment Form, (WebForms v1.0)

**Performance Work Statement
Work Assignment 1-04
CADMUS CONTRACT EP-C-12-023**

A. Title: Technical Support for Six Year Review of National Primary Drinking Water Regulations

B. Period of Performance: Issuance of this work assignment through April 30, 2014

C. Work Assignment Manager: Karen Wirth, U.S. EPA
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Alternate Work Assignment Manager: Richard Weisman, U.S. EPA
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(202) 564-3767 (fax)
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D. Background

Under the Safe Drinking Water Act (SDWA), as amended in 1996, the U.S. Environmental Protection Agency (EPA) must review existing National Primary Drinking Water Regulations (NPDWRs) at least once every six years, and revise them, if appropriate. This requirement is contained in Section 1412(b)(9) of SDWA. Any revisions to existing NPDWRs must maintain, or provide for greater, protection of the health of persons.

The review result to take no action on or revise a NPDWR is in part dependent on the re-evaluation of exposure to drinking water contaminants based on their health effects and occurrence. Compliance monitoring data and treatment technique information are key components in the 6-year review process. Through the Information Collection Requirements (ICR) process, the Agency facilitates data sharing with States in order to obtain comprehensive nationally representative occurrence data.

To support the third round of 6-year review process, EPA needs to update the occurrence database to include compliance monitoring data and treatment technique information from January 2006 to December 2011, to include information pertaining to the Surface Water Treatment Rules, Disinfectants and Disinfection Byproduct Rules, Ground Water Rule, and the Filter Backwash Recycling Rule that were not collected during the first or second round of 6-year review.

Under this work assignment, EPA will obtain the compliance monitoring data and treatment technique information needed from the States under the Information Collection Requirements (ICR). Following data collection EPA will update and refine its occurrence analysis using data obtained from

states through the ICR. The result of this effort will provide EPA with up-to-date data to help inform EPA's understanding of regulated contaminant occurrence in water supply systems throughout the nation.

E. Quality Assurance

Tasks 1, 2 and 3 in this work assignment require the collection and use of primary and/or secondary data. Collection, use and analysis of the data will be identical to the procedures described in the Supplemental Quality Assurance Project Plan (SQAPP), completed under task(s) 0 of Work Assignment 0-04 of this contract (EP-C-12-023), consistent with the Agency's quality assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The QA requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

F. Task Description:

This assignment is a continuation of WA 0-04. The purpose of this assignment will be to complete the collection of compliance monitoring data and treatment technique information (initiated under 0-04 of this contract) needed from the States under the Information Collection Requirements (ICR). Under this assignment the contractor will also review and edit data in preparation for data analysis. Occurrence and exposure provide accurate and representative occurrence and exposure distributions of regulated contaminants in public water supplies. The occurrence and exposure data along with treatment technique information will be used in the decision process for the revision of regulations for regulated contaminants in the third six-year review cycle.

Primary tasks of this WA include: (1) Providing technical assistance with data submission and reviewing, editing and formatting State monitoring and compliance data; (2) Review, editing, and formatting of data collected from the States through the ICR; (3) Statistical analysis; (4) additional data collection and analyses; and (5) issue papers and technical support.

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which the staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the establishment of the objectives and processes necessary to deliver results in accordance with EPA's Section 508 requirements and policies where applicable. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-04. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the PQAPP completed under WA0-04. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs

broken out by the tasks in this WA. The contractor shall immediately notify the Project Officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract level QAPP, accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new PQAPP approval from the PO via email.

Deliverables: Work plan and monthly progress and financial reports.

Task 1: Review, edit and format State monitoring and compliance data.

Using the provisions and requirements outlined in the renewed Information Collection Request (ICR) No. 2231.01 (71 FR 32340), States were requested to submit compliance monitoring data (occurrence data and treatment technique data) for public water systems (PWSs) to support the Agency's third Six-Year Review. Monitoring data from 2006 to 2011 have been requested for all regulated chemical and radiological contaminants, microbiological contaminants, as well as data from the Ground Water Rule (GWR), Surface Water Treatment Rule (SWTR), Long Term 1 and 2 Enhanced Surface Water Treatment Rules (LT1 and LT2) and Interim Enhanced Surface Water Treatment Rule (IESWTR), Stage 1 and 2 Disinfectants and Disinfection Byproducts Rules (DBPRs), and Filter Backwash Recycling Rule (FBRR). This review cycle, hereafter referred to as Six-Year Review 3, encompasses the review cycle of 2009-2015. The contractor shall continue efforts initiated under WA 0-04 of this contract collecting State data sets through electronic file transfer protocol (FTP) to a specified secure site, email, and mailed/shipped CDs/DVDs or other information storage formats. The contractor shall continue to assess the state compliance monitoring data sets, provided to the contractor under WA 0-04, for completeness and representativeness. The contractor shall perform data review and formatting and uniform quality assurance/quality control (QA/QC) assessments on each state's data set, including but not limited to the data elements specified below.

The data to be reviewed are currently stored electronically (no paper records). The contractor shall maintain a secure database and file transfer protocol (FTP) site by which states can submit the requested data. For primacy agencies that use the Safe Drinking Water Information System (SDWIS)/State for their data storage and management. Upon receipt of the state requested data, the contractor shall develop a structure to upload the state data sets to an SQL server. Research and develop the protocol for the upload of all data sets to a SQL server to better facilitate future analyses.

Requested Data Categories	
Data Category	Description
<i>System-Specific Information</i>	
Public Water System Identification Number (PWSID)	The code used to identify each PWS. The code begins with the standard 2-character postal State abbreviation or Region code; the remaining 7 numbers are unique to each PWS in the State.
System Name	Name of the PWS.

Requested Data Categories	
Data Category	Description
Federal Public Water System Type Code	A code to identify whether a system is: <ul style="list-style-type: none"> • Community Water System; • Non-transient Non-community Water System; or • Transient Non-community Water System.
Population Served	Highest average daily number of people served by a PWS, when in operation.
Federal Source Water Type	Type of water at the source. Source water type can be: <ul style="list-style-type: none"> • Ground water; or • Surface water; or • Ground water under the direct influence of surface water (GWUDI) (Note: Some States may not distinguish GWUDI from surface water sources. In those States, a GWUDI source should be reported as a surface water source type.)
Sanitary Survey Information	Site visit information for TCR, GWR, and SWTRs, including: site visit type, date completed, associated deficiencies identified, corrective actions taken.
<i>Treatment Information</i>	
Water System Facility	System facility data, including: treatment plant identification number, treatment plant information, treatment unit process/objectives, facility flow, treatment train (train or flow of water through treatment units within the treatment plant).
Filtration Type	Information relating to system filtration, including: filtration status, types of filtration (e.g., unfiltered, conventional filtration, and other permitted values)
Treatment Technique Information	Information pertaining to treatment processes. Types of treatment technique information including: coagulant/coagulant aid type and dose, disinfectant concentration (amounts, types, primary and secondary types of disinfection, disinfection profile/bench mark data), log of viral inactivation/removal, contact time, contact value, pH, temperature.
Filter Backwash Information	Information about filter backwash that is returned to the treatment plant influent (e.g., information on: recycle/schematic status, alternative return location, corrective action requirements, and recycle flows and frequency).
<i>Sample-Specific Information</i>	
Sampling Point Identification Code	A sampling point identifier established by the State, unique within each applicable facility, for each applicable sampling location (e.g., entry point to the distribution system). This information enables occurrence assessments that address intra-system variability.
Sample Identification Number	Identifier assigned by State or the laboratory that uniquely identifies a sample.

Requested Data Categories	
Data Category	Description
Sample Collection Date	Date the sample is collected, including month, day and year.
Sample Type	Indicates why the sample is being collected (e.g., compliance, routine, repeat, confirmation, additional routine samples, duplicate, special, special duplicate, etc.).
Sample Analysis Type Code	<p>Code for type of water sample collected.</p> <ul style="list-style-type: none"> • Raw (Untreated) water sample • Finished (Treated) water sample <p><i>For lead and copper only:</i></p> <ul style="list-style-type: none"> • Source • Tap <p><i>For TCR Repeats only; indicator of sampling location relative to sample point where positive sample was originally collected:</i></p> <ul style="list-style-type: none"> • Upstream • Downstream • Original
Contaminant	Contaminant name, 4-digit SDWIS contaminant identification number, or Chemical Abstracts Service (CAS) Registry Number for which the sample is being analyzed.
Sample Analytical Result - Sign	<p>The sign indicates whether the sample analytical result was:</p> <ul style="list-style-type: none"> • (<) "less than" means the contaminant was not detected or was detected at a level "less than" the minimum reporting level (MRL). • (=) "equal to" means the contaminant was detected at a level "equal to" the value reported in "Sample Analytical Result - Value." <p><i>(Not required for TCR data)</i></p>
Sample Analytical Result - Value	<p>Actual numeric (decimal) value of the analysis for the chemical results, or the MRL if the analytical result is less than the contaminant's MRL.</p> <p><i>For the TCR, results will indicate presence/absence.</i></p>
Sample Analytical Result - Unit of Measure	<p>Unit of measurement for the analytical results reported (usually expressed in either ug/L or mg/L for chemicals; or pCi/l or mrem/yr for radiological contaminants).</p> <p><i>(Not required for TCR data)</i></p>
Sample Analytical Method Number	EPA identification number of the analytical method used to analyze the sample for a given contaminant.
Minimum Reporting Level (MRL) - Value	<p>MRL refers to the lowest concentration of an analyte that may be reported.</p> <p><i>(Not required for TCR data)</i></p>

Requested Data Categories	
Data Category	Description
MRL - Unit of Measure	Unit of measure to express the concentration value of a contaminant's MRL. <i>(Not required for TCR data)</i>
Source Water Monitoring Information	Total organic carbon (TOC), including percent TOC removal, TOC removal summary, pH, alkalinity, monitoring data entered as individual results or included in DBP (or monthly operating report (MOR)) summary records, alternative compliance criteria.
Sample Summary Reports	Sample summaries for DBPRs, SWTRs, and LCR associated with analytical result records. Values used for compliance determination [e.g., turbidity (combined effluent/individual effluent), disinfectant residual levels in treatment plant and distribution system, treatment technique information, HPC, etc.]

The contractor, if necessary, shall also provide technical support to state and regional data managers, as necessary, with use of the data extraction tool and data upload procedures.

Task 2: Quality assurance/quality control (QA/QC) check and edit State occurrence data.

After receiving and formatting data, the contractor shall assess the state compliance monitoring data sets, for completeness and representativeness and conduct the necessary data review, editing, and quality assurance/quality control (QA/QC) across all State data sets to allow uniform assessments across all the data sets, and allow subsequent data management and analysis to provide an overview of occurrence estimates at the national level.

It is expected that the contractor may need to contact some States' data management staff to address questions regarding the data quality, such as apparently incorrect units of measurement, outlier values, incorrect, missing, or undefined data elements, or other apparent data problems. When contacting State staff, the contractor's personnel shall identify themselves as contractors. In addition, the contractor shall address identified errors that do not have straight-forward solutions through consultations with the appropriate State data management staff. The contractor shall minimize the need for a lot of "back and forth" with the states by preparing a "flagged data" report for each data submitting state. These reports shall identify data of questionable quality and provide recommended "dispositions" of the data for state's agreement or clarification. Where appropriate, the contractor shall extract the additional inventory information from SDWIS, or from other inventory sources to augment the data provided by the States. As part of the QA/QC procedures, the contractor shall document all edits or changes made to the raw monitoring data and provide to the WAM a formal description of QA/QC process performed on data analyzed. EPA recognizes that this task will be more complex for some contaminants than others (e.g. radiological contaminants) and the treatment information (e.g., surface water treatment rules and DBP rules) due to the complexity and unique characteristics (including units of measure and reporting requirements). The contractor shall maintain a record and/or log of the edits that were applied to the data for which States will be provided with the edited data or

log of edits made upon request prior to the posting and storage of data in the EPA data warehouse.

As part of the QA/QC review, the contractor shall assess contaminant specific values to identify, for example, possible measurement unit errors for reported results or the presence of outliers and to delete incorrect duplicate data entries. The contractor shall follow the formal description of the data set QA/QC process established initially in work assignment 0-04 of this contract.

Deliverables: Approach used to perform QA/QC process to assess data sets, flagged data reports, documented edits or changes made to the raw state monitoring data, and provide to the WAM with a document that provides all edits or changes made to the raw state monitoring data set.

Task 3: Statistical analysis and report on regulated chemical and radiological contaminants.

Upon receiving technical direction from the EPA WAM, the contractor shall perform detailed statistical analyses of data on approximately 67 contaminants. These contaminants will be selected by EPA for regulatory review and identified by the EPA WAM through technical direction. In performing these analyses, the contractor shall utilize "Stage 1" analysis that estimates the number and percent of systems (and populations served by these systems) with at least one analytical result greater than a specified concentration threshold for all specified contaminants. The contractor shall also perform "Stage 2" analyses (for up to 30 of the 67 total contaminants), utilizing the Bayesian-based hierarchical analytical models developed and refined by the contractor during the first and second rounds of 6-year review, to derive nationally representative distribution estimates of contaminant occurrence and exposure. In instances where it is necessary to augment data, the contractor shall analyze the regulated contaminant occurrence data and relate them to source water quality data for the selected contaminants. If necessary, the contractor shall also conduct analysis of intra-system variability of contaminant sources, co-occurrence, trend analysis, relation to land cover, land use/practices and potential natural contaminant sources.

Occurrence and exposure shall be characterized at various levels, for each contaminant at concentrations of: at the detection limit, at the Maximum Contaminant Level Goal (MCLG) if different from the MCL; 25% MCL; 50% MCL; 75% MCL; and 100% MCL; and/or at 3 to 5 additional levels as directed by the WAM.. The contractor shall provide the lower and upper 95% confidence limits for each level characterized.

The contractor shall prepare a draft report on the results of occurrence and exposure analysis for all contaminants specified for analysis by the WAM through written technical direction. The report shall include, but not limited to, regional occurrence analyses, maps, data, and/or geologic matrices to portray and/or quantify national and regional distribution in public water supply systems. The report shall be used for internal deliberative discussions. If requested by the WAM, the contractor shall prepare and give an oral presentation of the results at the time the draft report is submitted to the WAM.

Deliverables: For work planning purposes, up to 4 draft reports on occurrence and exposure analysis of contaminants may be required. The contractor should assume three iterations of each document: 2 drafts and 1 final draft.

Task 4: Additional Data Collection and Analyses

Based on written technical direction from the EPA WAM, the contractor shall collect and gather additional occurrence and/or treatment data. If appropriate, the contractor shall recommend technical approach(es) to collecting information such as performing literature searches, contacting experts, or conducting a small survey (less than nine entities per issue) to assist in the consideration of up to four occurrence- exposure related issues identified by the EPA WAM as needing further analysis. The methods and protocols, including quality assurance procedures, for gathering information shall be submitted to the WAM for approval. As specified in written technical direction, the contractor shall review, critically assess, indicate assumptions made, summarize information, and develop conclusions based on information obtained and develop a summary of each issue identified according to a framework approved by the WAM. The contractor shall also provide copies of all the manuscripts obtained via literature search and an electronic bibliography of the manuscripts.

Deliverables: For work planning purposes, up to 3 technical analyses may be required. The contractor should assume three iterations of each document: 2 drafts and 1 final.

Task 5: Issue Papers and Technical Support

The contractor shall develop issue papers and technical analyses as requested through written technical direction by the EPA WAM. EPA anticipates that some issues may become high priority during this review process and may require analytical support for internal Agency decision-making processes. Upon direction from the EPA WAM, the contractor shall collect summary information on particular contaminants or issues (e.g., methods, treatment options), risk assessment background and status information, and perform preliminary cost-benefit analyses.

Deliverables: For work planning purposes, up to 3 analyses may be required. The contractor should assume three iterations of each document: 2 drafts and 1 final.

G. Schedule of Deliverables

The contractor shall deliver all draft final and final documents as unbound hard copy and in OGWDW compatible software. Unless otherwise directed by the EPA WAM in writing, the contractor shall deliver all other products electronically. All due dates below are calendar days, weeks, or months unless otherwise noted.

Task	Deliverable	Schedule
0	Work Plan, -per contract requirements monthly progress – Per contract requirements	Per contract
2	Revised Draft description of approach of QA/QC process to assess data sets to be acquired from States.	3 weeks after written technical direction

Task	Deliverable	Schedule
	Final description of approach of QA/QC process to assess data sets acquired from States.	2 weeks after written technical direction
	Flagged data reports (up to 49, per privacy agency)	3 weeks after written technical direction
	Draft documented edits or changes made to the raw state monitoring data and provide to the WAM with a formal description of QA/QC process performed on data.	3 weeks after written technical from WAM
	Final documented edits or changes made to the raw state monitoring data and provide to the WAM with a formal description of QA/QC process performed on data.	2 weeks following EPA WAM comments on draft document
3	Draft report on occurrence and exposure analysis of a contaminants.	2 weeks after written technical from WAM
	Final draft report on occurrence and exposure analysis of contaminants.	2 weeks after written technical from WAM
4	Issue analyses method outline	1 week after receiving written technical direction from the EPA WAM
	Draft/final analyses and references	2 weeks after receiving written technical direction from the EPA WAM to produce draft/final papers
5	Up to 3 issue papers and/or three technical analyses as requested.	10 days after receiving written technical direction from EPA WAM

H. Level of Effort Estimates: 2600 hours

I. Conference/Meeting Guidelines and Limitations:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the

Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. Travel

For work planning purposes, the contractor should assume 2 one day trips to Washington, DC, during the period of performance. The purpose of this trip will be to coordinate with EPA staff regarding this work assignment. The contractor's travel shall be in accordance with EPA travel requirements and authorized in advance by the EPA Project Officer.

K. Special Reporting Requirements: As outlined in this Performance Work Statement (PWS).

L. Quality Assurance Surveillance Plan

The performance standards, incentives and disincentives established in the Quality Assurance Surveillance Plan of Contract EP-C-12-023 apply to this work assignment.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-05				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			Support for UCMR				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW Section 2.0, 3.0, and 4.0					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 05/01/2013 To 04/30/2014					
Comments:										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						2,350				
Total:						2,350				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Brenda Parris						Branch/Mail Code:				
						Phone Number 513-569-7961				
_____ (Signature) (Date)						FAX Number:				
Project Officer Name Ronald Coleman						Branch/Mail Code:				
						Phone Number: 202-564-8491				
_____ (Signature) (Date)						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
						Phone Number:				
_____ (Signature) (Date)						FAX Number:				
Contracting Official Name Noelle Mills						Branch/Mail Code:				
						Phone Number: 513-487-2171				
_____ (Signature) (Date)						FAX Number:				

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-05**

A. TITLE: Support for Rule Development and Implementation of the Unregulated Contaminant Monitoring Rule (UCMR)

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

Brenda Parris
U.S. Environmental Protection Agency
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ALTERNATE WORK ASSIGNMENT MANAGER:

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Fax: (513) 569-7191

D. BACKGROUND:

The 1996 Safe Drinking Water Act Amendments require EPA establish criteria for a monitoring program and publish a list of not more than 30 unregulated contaminants, for which public water systems (PWS) will monitor. The monitoring program will provide a national basis for the location, concentration, and related information regarding the occurrence of these contaminants in public drinking water. EPA published the first Unregulated Contaminant Monitoring Rule (UCMR 1) in 1999, the second (UCMR 2) in 2007, and the third (UCMR 3) in 2012. EPA should publish the proposal for fourth (UCMR 4) in early 2015.

The UCMR program divides contaminants into lists based on the availability of analytical methods. The UCMR program also includes specific instructions on sampling locations, and coordination of rule implementation between States, EPA and PWS.

EPA uses the unregulated contaminant monitoring data in determining which contaminants pose the greatest risks to human health and, if necessary, setting priorities for their regulation. Conversely, contaminants that potentially pose risks to human health but are not found in drinking water supplies may be removed from consideration for regulation under the Safe Drinking Water Act if this monitoring program indicates that they do not occur at significant levels.

E. QUALITY ASSURANCE:

Tasks 1 and 2 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under tasks 1 and 2 of WA 0-05, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-05. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under tasks 1 and 2 of WA 0-05. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP) accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via email.

Deliverables: Work plan, monthly progress reports.

Task 1: Rulemaking Support

Task 1.1 Technical Analyses

The contractor shall provide technical analyses and documentation for Rapid Response Requests related to UCMR at the written direction of the EPA WAM. The analysis may be performed in support of the statistical design, and determination of occurrence and health related data in support of inclusion of contaminants in UCMR. For costing purposes the contractor should assume to include collecting occurrence and health data for up to 120 potential contaminants as excel summaries and/or 1-3 page white papers compiled into the Compendium. The contractor shall also provide a technical analyses and documentation for the cost benefit and paperwork reduction sections, and the Information Collection Request requested by the EPA WAM in written technical direction.

Deliverables: Rapid response requests, contaminant excel summary, contaminant white papers for Compendium, cost benefit and paperwork reduction sections.

Task 1.2. Federal Register Support

The contractor shall provide support to the UCMR workgroup. The support shall participate by phone or in person for UCMR regulatory meetings and conference calls as technical experts; preparing meeting documents and summaries; conducting literature searches; and drafting several brief technical reviews and what-if analysis including the analytical blueprint.

The proposed UCMR 4 should be finalized by January 2015; with two stakeholder meetings, one in May 2013 and one in October 2013. Both stakeholder meetings will also be broadcasted as a webinar. The EPA WAM will provide more details through written technical direction. In addition to preparing meeting summaries, the contractor shall provide pre-meeting support such as preparing and distributing meeting materials and agendas. The contractor shall review and evaluate all notes and presentations delivered to EPA to ensure accuracy and technical soundness. For planning purposes, the Contractor shall assume two trips to EPA's Technical Support Center, Cincinnati Office or to Washington DC.

While EPA does not anticipate the contractor's support to any individual meeting or other event (conference, workshop, symposium, retreat, seminar or training) incurring \$25,000 in cost, the contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager if it anticipates support to such event reaching this cost. Event expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

Additionally, to prepare for the development of the proposed rule and package, the contractor shall provide materials needed to assist with rule development, review all documents for continuity, draft the Information Collection Request, and update documents as necessary. This will require an extensive expertise in the rulemaking process.

Deliverables: Workgroup materials including the analytical blueprint, stakeholder meeting materials, rule development materials, Information Collection Request.

Task 1.3. Minimum Reporting Levels (MRL) and Lowest Concentration Minimum Reporting Levels (LCMRL) Support

An important part of the rule development is the determination of MRLs for contaminants considered for UCMR monitoring. This requires the contractor subcontract with multiple analytical laboratories that can perform LCMRL analyses. For the purposes of estimating costs, the contractor should assume that it will be necessary to subcontract with three to five laboratories to perform LCMRL analyses for eight methods containing up to 10 analytes each. In addition, the contractor shall provide technical support in the evaluation of the LCMRL calculator, drafting a summary of the data, and any support needed to make improvements, if needed.

Deliverables: LCMRL data sets.

Task 2.0 Guidance/Program Support for Implementation

The contractor shall support EPA in providing technical analyses, what-if analyses, and documentation to implement UCMR. The contractor shall finalize the UCMR Reference Guide. Additionally the contractor

may communicate with stakeholders, and draft fact sheets or question and answers on hot-topic items; as directed by the EPA WAM.

Deliverables: Reference Guide.

G. SCHEDULE OF DELIVERABLES:

The contractor shall deliver all documents in OGWDW software compatible electronic format; for finals, the contractor shall deliver one electronic copy (disk, CD or e-mail, word processing and PDF for posting to Web). All due dates below are calendar days, weeks and months.

Unless otherwise specified in technical direction, any deliverables produced under this contract shall be delivered using the following software: current Agency MS Office Applications and CD-ROM, DVD or CD-RW media. In addition, when the Section 508 Requirements versions specified in the table below are needed, the MS Office version should be delivered concurrently. The WAM shall have the option of specifying or approving alternative software and/or conventions for deliverables produced under this contract.

Additionally, unless otherwise specified in technical direction, any deliverables produced under this contract shall be delivered using the current Agency MS Office Applications as well as

Deliverables designed for the public or EPA website shall meet EPA's policies, procedures and standards (e.g., Communication Stylebook <http://www2.epa.gov/stylebook>; Correspondence Manual <http://workplace.epa.gov/manual/index.html>; Section 508 Requirements <http://www.epa.gov/accessibility/>).

Task	Deliverable	Due to EPA	No of Copies/Medium
0	Work plan	Per contract	One copy via email
0	Monthly progress and financial reports	Per contract	One copy via email
1.1	Rapid response requests – technical analyses	Per timeframe identified in each written technical direction	One copy via email
1.1	Contaminant excel summary	Within 60-days of EPA's technical direction to start	One copy via email
1.1	Contaminant white papers for Compendium	Within 90-days of EPA's technical direction to start	One 508 copy via email
1.1	Cost benefit and paperwork reduction sections.	Within 45-days of EPA's technical direction to start	One 508 copy via email
1.2	Workgroup materials including the analytical blueprint	Within 30-days of EPA's technical direction to start	One copy via email
1.2	Meeting summaries	Within 5-days of meeting	One 508 copy via email
1.2	Arrange and coordinate stakeholder meeting	Within 45-days of EPA's technical direction to start	One copy via email; possibly hard copy
1.2	Rule development materials	Within 30-days of EPA's technical direction to start	One 508 copy via email
1.2	Information Collection Request	Within 90-days of EPA's technical direction to start	One 508 copy via email

1.3	LCMRL Studies	Within 45-days of EPA's technical direction to start	One copy via email
2.0	Implementation technical and what-if analysis	Within 30-days of EPA's technical direction to start	One copy via email
2.0	Reference Guide	Within 15-days of EPA's technical direction to start	One 508 copy via email
2.0	Fact Sheets or Question and Answers	Within 30-days of EPA's technical direction to start	One 508 copy via email

H. LEVEL OF EFFORT ESTIMATES: 2350

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

The contractor shall assume travel will be required in support of this work effort. The EPA WAM will provide written technical direction. Prior to travel, the contractor shall receive authorization from the Project Officer.

K. SPECIAL REPORTING REQUIREMENTS:

The contractor shall report any urgent issues to the WAM via phone or email.

L. QUALITY ASSURANCE SURVEILLANCE PLAN:

Per Contract requirements.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-06				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Support for CCL4				
Contractor CADMUS GROUP, INC., THE						Specify Section and paragraph of Contract SOW Section 1.2, 2.1, 3.1.1, 3.2.2, 3.3, 4.1 and 5.0				
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> (Max 2) Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						4,360				
Total:						4,360				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Meredith Russell						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 202-564-0814				
						FAX Number:				
Project Officer Name Ronald Coleman						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8491				
						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Robert A. Knecht						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 513-487-2043				
						FAX Number:				

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1- 06**

A. TITLE: Support for the Contaminant Candidate List 4 Chemical Selection

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

Meredith Russell
US EPA OW/OGWDW/SRMD
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Phone: (202) 564-0814
Fax: (202) 564-3760
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ALTERNATE WORK ASSIGNMENT MANAGER:

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Fax: (202) 564-3760
E-mail: Perkinson.Russ@epa.gov

D. BACKGROUND:

The Safe Drinking Water Act (SDWA) as amended in 1996 requires EPA to publish a list of contaminants that are known or anticipated to occur in public water systems, and which may require regulation under the SDWA known as the Drinking Water Contaminant Candidate List, or CCL. (Section 1412(b)(1)).

EPA published the final third drinking water Contaminant Candidate List (CCL 3) in the Federal Register on October 8, 2009. In developing the CCL 3, EPA implemented an improved process from that which was used for previous CCLs. The CCL 3 process was based on substantial expert input and recommendations from the National Academy of Science's National Research Council (NRC) and National Drinking Water Advisory Council (NDWAC). EPA used a multi-step process to identify contaminants for inclusion on the CCL 3. The first step involved identifying a broad universe of approximately 7,500 potential drinking water contaminants. The Agency then applied screening criteria to identify a preliminary CCL of almost 600 contaminants based on a contaminant's potential to occur in

public water systems and the potential for public health concern. These chemicals were then further evaluated using a classification approach and expert judgment to identify the CCL 3.

This work assignment will continue efforts to develop the fourth Contaminant Candidate List (CCL 4). On May 8, 2012, EPA requested public nominations of contaminants to be considered for CCL 4 and supporting information that was made available since the third CCL (CCL 3) or was not considered in CCL 3 that shows the nominated contaminant may have an adverse health effect on people and the contaminant occurs or is likely to occur in public water systems. The nominations period ended on June 22, 2012. Evaluation of the nominated contaminants was begun previously under contract EP-C -07-022 (WA 5-10) and contract EP-C-12-023 (WA 0-06), this WA will build upon those efforts to evaluate the nominated contaminants and summarize and document how the nominated contaminants were evaluated.

The contractor shall produce deliverables according to the statement of work below. Upon receipt of comments from the EPA WAM, the contractor shall revise the draft deliverables into a finalized product(s) to support and document the CCL 4.

E. QUALITY ASSURANCE

Task(s) 2-6 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under task(s) 0 of WA 0-06, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP)]. The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. STATEMENT OF WORK

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-06. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under task(s) 0 of WA 0-06. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being

resolved. Monthly financial reports must include a table with the invoice LOE and costs` broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP] accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via e-mail.

Deliverables: Work plan, monthly progress and financial reports.

Task 1.0: General Meeting Support for the CCL

Based on written technical direction from the EPA WAM, the contractor shall attend from 1-5 conference calls of the CCL 4 team, or other meetings related to the CCL process. The contractor shall provide 1-2 technical experts on the CCL process and drinking water chemical exposure to provide input in the meeting and in meeting preparation. The contractor shall provide for the taking of meeting notes and shall provide a copy to the WAM within 5 working days of the conclusion of the meeting

Deliverables: Meeting Notes

Task 2.0: Data Collection and Evaluation of Potential Drinking Water Data Sources for CCL 4

Under previous WA's (4-10 , 5-10, and 0-06) the contractor collected updated data to be utilized in CCL 4 from an approved list of data sources. Based upon the EPA WAM's written direction, the contractor shall collect and compile any additional updated data for CCL 3 contaminants, contaminants with previous negative regulatory determinations, CCL 4 nominated contaminants, and other selected groups or individual contaminants from the approved data sources, in accordance with the data management plan approved under WA 5-10. The contractor shall provide summary spread sheets of the compiled data as requested by the EPA WAM. The contractor shall also continue to update the lists and inventory of updated data sources identified for use in CCL 4 that were developed under WA 5-10. The contractor shall continue to update the CCL 4 data compilation and upon completion of data collection efforts, the contractor shall deliver the Draft CCL 4 data compilation. The data compilation shall meet OGWDW and EPA data warehouse standards.

Deliverables: Draft(s) and Draft Final summary spread sheets of compiled data

Draft(s) and Draft Final lists and inventory of data sources for the CCL 4

Draft(s) and Draft Final versions of the data compilation containing data for the Draft CCL 4

Task 3.0: Nominations Data Support, Evaluation, and Nominations Summary Document

Under the previous WA, the contractor evaluated data submitted during the CCL 4 public nominations process and screened contaminants with new data (data collected or identified since the CCL 3) through the CCL 4 process. The contractor also provided draft summaries (tables/ spread sheets) of the status of the nominated contaminants in the CCL 4 process (i.e., was the nominated contaminant added to the

CCL 4 Universe, PCCL, or CCL 4). Based on written technical direction from the EPA WAM, the contractor shall update these evaluations and documents. Portions of the CCL 4 nominations summary support document have already been drafted and have been provided to the contractor. Based on written technical direction from the EPA WAM, the contractor shall include a written summary of the evaluation of nominated contaminants in the CCL 4 nominations summary support document and shall finalize this document for publishing in the CCL 4 docket. The contractor shall also prepare and/ or update tables or appendices for the nominations summary document at the direction of the EPA WAM (potentially to include nominated contaminants that were added to each step of the CCL 4 process, such as Universe, PCCL, or CCL 4). At the direction of the EPA WAM, the contractor shall also update and finalize the contaminant information sheets and other data summaries (i.e., the screening data summary) for the nominated contaminants that were previously drafted under WA 0-06 to include data used in the evaluation, application of screening criteria or scoring protocols, model results, HRL/concentration ratios, and listing decisions for nominated contaminants accordingly.

Deliverables: Draft and Final Status of nominated contaminants in CCL 4 process

Draft (s) and Final data summaries and Contaminant Information Sheets for nominated contaminants

Draft(s) and Final CCL 4 nominations summary support document (508 compliant)

Task 4.0: Technical Analyses, Data Evaluation and Identification of Contaminants for the Draft CCL 4

The contractor shall conduct technical analyses related to the CCL and provide technical and analytical writing related to the analyses. Technical analyses will include evaluation of contaminants for inclusion on the Draft CCL 4 utilizing the data collected and the CCL screening and scoring processes and criteria for evaluating a contaminant. Under the previous WA (WA 0-06), the contractor analyzed new data for contaminants with previous regulatory determinations (from Regulatory Determinations 1 & 2), and provided summaries of those contaminants and draft Contaminant Information Sheets. The contractor shall update those evaluations, summaries, and Contaminant Information Sheets as necessary. Additionally, the contractor began to analyze data for other CCL 3 contaminants (that were not nominated) under the previous WA 0-06. At the written direction of the EPA WAM, the contractor shall continue those analyses, and provide Contaminant Information Sheets, or other summaries of the screening and scoring of those contaminants. Based on any updated evaluations, the contractor shall update the draft(s) lists of contaminants that, based upon the CCL criteria and process, will be included on the draft CCL 4, as well as, any contaminants that might be added to the CCL 4 Universe or PCCL 4. At the request of the EPA WAM, the contractor shall also provide a spread sheet and written summary of any changes between the Draft CCL 4 and the Final CCL 3 and document the data and reason for such changes. Based on the EPA WAM's written direction, the contractor may also need to provide summary statistics about the contaminants in the Universe, PCCL, and Draft CCL 4, such as information on the number of contaminants in various groups, such as (pesticides, emerging contaminants, pharmaceuticals, disinfection byproducts, microbes, chemicals used in commerce such as industrial chemicals, and any other groups as necessary).

Deliverables: Draft(s) and Final lists of the Draft CCL 4, CCL 4 Universe, and PCCL 4

Draft(s) and Final data summaries for contaminants with previous negative regulatory determinations and other CCL 3 contaminants (Contaminant Information Sheets or other summary spreadsheets)

Draft(s) and Final spreadsheet and written summary of changes between CCL 3 and the draft CCL 4

Draft and Final summary statistics of Draft CCL 4 contaminants

Task 5.0: Supporting Documentation for the Draft CCL 4

Based on written technical direction from the EPA WAM, the contractor shall provide support in the development of supporting documentation for the CCL 4. The contractor shall also potentially provide support for developing briefing materials and other issue papers related to the CCL, based upon written technical direction from the EPA WAM. The supporting documents could include, but are not limited to, documenting the descriptions of new or updated data sources that were evaluated for CCL 4; documenting and updating summary tables of data used to screen contaminants from the Universe to the PCCL 4, and documenting the list of contaminants included on the Draft CCL 4 and their uses. Under a previous work assignment, three supporting documents were developed that explain the multi-step CCL 3 chemical screening & classification process in detail:

- CCL 3 Chemicals: Identifying the Universe,
- CCL 3 Chemicals: Screening to a PCCL,
- CCL 3 Chemicals: Classification of the PCCL to the CCL

These documents should be referenced in the CCL 4 supporting documentation, and some portions of these documents may need to be updated (based on new data and information that has been collected for CCL 4) or summarized, and may be utilized in development of the CCL 4 supporting documents. The details of the supporting documents will be specified in written technical direction from the WAM. These products shall adhere to the OGWDW standard operating procedures for printed or web related materials.

Deliverables: Draft(s) and Final supporting documents for the Draft CCL 4 (508 compliant)

Task 6.0: Support for the CCL 4 Comment Response Process

Identify and Summarize comments

EPA plans to publish a Federal Register Notice presenting the Draft CCL 4 list for public comment. At the technical direction of the EPA WAM, the contractor shall assist EPA with the comment response process. The public comment period may extend past the period of performance of this work assignment, so this task will cover any comments received during the period of performance. The contractor shall review all comment letters, e-mail and attachments as they are received by the OW Docket Center to identify and summarize the comments and main issues. The comment summary should include a classification

of each comment letter by commenter category (e.g., environmental group, state or local government, etc.), the number of comments on each contaminant (or group of contaminant), and major issues/themes should be identified.

Update the Web-based Comment-Response Database and Develop a List of Comment Codes

Under previous contracts and WA's (for CCL 3 WA 1-23) (and in support of the perchlorate final regulatory determination), the contractor developed a web-based comment response database. The contractor shall update and maintain this database for the purpose of containing and tracking all correspondence received from the public on the draft CCL 3 Federal Register Notice. All official comments shall be maintained as verbatim reproductions of the comments received from the public. The contractor shall develop a draft outline of comment codes for the purpose of categorizing public comments into the comment response database (to include at least one comment code for each contaminant included on the draft CCL 4). The EPA WAM will review this draft outline and provide comments to the contractor. Upon receipt of these comments, the contractor shall incorporate the comments into the outline and submit the finalized outline to the WAM.

Develop tracking codes and enter comments into database

After the WAM approves the final outline, the contractor shall review, as they are received, all public comment letters, e-mail, and attachments received by the OW Docket Center and provide each comment with tracking codes. These codes will identify the comment letter (as numbered by the OW docket), comment number of the individual comment within each letter, and the comment code (from the outline) that each individual comment falls under (comments should only be categorized into one comment code). The EPA WAM will review the marked up copy of each comment letter to examine the coding assigned to each comment.

EPA will review the marked comments to ensure accurate categorization of comments. The contractor shall reassign any comments originally mis-categorized after reviewing the written comments submitted by the EPA WAM, and enter each comment into the approved database.

The contractor shall check to ensure that all comments have been coded by subject area. The contractor shall ensure that each unique comment has been entered into the database. The entry shall contain all of the information coded above and the verbatim text of the comment. The contractor shall submit a written summary of significant issue to the EPA WAM.

Maintain the comment response database

The contractor shall maintain and update the database and its supporting documentation. The contractor shall minimize the down-time of the web link and notify the EPA WAM when the down-time does occur. The contractor shall locate comments by their subject code, track the number of comments under each subject code and check responses to ensure all comments have been responded to. Upon receipt of written technical direction from the EPA WAM, the contractor shall query the database and provide the EPA WAM with the approximate number and nature of comments received.

The contractor shall sort comments by subject category code for distribution to EPA staff responsible for responding to comments.

Deliverables: Draft Summary of Comments

Draft and Final Subject Category (Comment Code) Outline

Draft and Draft Final assignment of tracking codes for each letter

Draft Comment Response Database

G. SCHEDULE OF DELIVERABLES:

Task	Deliverable	Due to EPA	No of Copies/ Medium
0- Work Plan and Monthly Progress Reports		Per Contract	Per Contract
1 -General Meeting Support for the CCL	Meeting Notes	Within 5 days of the conclusion of the meeting	Electronic
2 -Data Collection and Evaluation of Potential Drinking Water Data Sources for CCL 4	Summary spread sheets of compiled data Draft(s) Draft Final	- TBD in written technical direction from the EPA WAM - 10 days after receipt of written comments from the EPA WAM	Electronic
	Lists and inventory of data sources for the CCL 4 Draft(s) Draft Final	-TBD in written technical direction from the EPA WAM -10 days after receipt of written comments from the EPA WAM	Electronic
	Draft(s) and Draft Final versions of the data compilation containing data for the Draft CCL 4	-TBD in written technical direction from the EPA WAM -2 weeks after receipt of written comments from the EPA WAM	CD and electronically
3- Nominations Data	Status of nominated		Electronic- Final

Support, Evaluation, and Nominations Summary Document	<p>contaminants in CCL 4 process</p> <ul style="list-style-type: none"> -Draft -Final <p>Data summaries and Contaminant Information Sheets for nominated contaminants</p> <ul style="list-style-type: none"> -Draft (s) -Final <p>CCL 4 nominations summary support document</p> <ul style="list-style-type: none"> -Draft(s) -Final 	<p>-TBD in written technical direction from the EPA WAM</p> <p>- one week after receipt of written comments from the EPA WAM</p> <p>-TBD in written technical direction from the EPA WAM</p> <p>- Two weeks after receipt of written comments from the EPA WAM</p> <p>-TBD in written technical direction from the EPA WAM</p> <p>- Two weeks after receipt of written comments from the EPA WAM</p>	Nominations Support Document should be 508 compliant
4- Technical Analyses, Data Evaluation and Identification of Contaminants for the Draft CCL 4	<p>Draft and Final lists of the CCL 4, CCL 4 Universe, and PCCL 4</p> <p>Data summaries (Contaminant Information Sheets)</p> <ul style="list-style-type: none"> -Draft(s) - Final 	<p>-TBD in written technical direction from the EPA WAM</p> <p>-10 days after receipt of written comments from the EPA WAM</p> <p>-TBD in written technical direction from the EPA WAM</p>	Electronic

	<p>Spreadsheet and written summary of changes between CCL 3 and the draft CCL 4</p> <ul style="list-style-type: none"> -Draft(s) - Final <p>Summary statistics of CCL 4 contaminants</p> <ul style="list-style-type: none"> -Draft - Final 	<ul style="list-style-type: none"> - Two weeks after receipt of written comments from the EPA WAM - TBD in written technical direction from the EPA WAM - 10 days after receipt of written comments from the EPA WAM - TBD in written technical direction from the EPA WAM - 10 days after receipt of written comments from the EPA WAM 	
5- Supporting Documentation for the Draft CCL 4	Draft(s) and Final supporting documents for the Draft CCL 4	<ul style="list-style-type: none"> -TBD in written technical direction from the EPA WAM -10 days after receipt of written comments from the EPA WAM 	Electronic- Final Documents should be 508 compliant
6- Support for the CCL 4 Comment Response Process	<p>Draft Summary of Comments</p> <p>Draft and Final Subject Category (Comment Code) Outline</p> <p>Draft and Draft Final assignment of tracking</p>	<ul style="list-style-type: none"> -TBD in written technical direction from the EPA WAM - TBD in written technical direction from the EPA WAM -one week after receipt of written comments from the EPA WAM - TBD in written technical direction from 	Electronic

	codes for each letter	the EPA WAM -10 days after receipt of written comments from the EPA WAM	
	Draft Comment Response Database	-TBD in written technical direction from the EPA WAM	

H. LEVEL OF EFFORT ESTIMATES: 4360 hrs.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL: Travel may be required for one technical expert from Cadmus to attend meetings for the purposes of this Work Assignment for no more than 2 days. For planning purposes, Cadmus can assume travel from Cadmus Headquarters in Massachusetts to Washington, DC.

K. SPECIAL REPORTING REQUIREMENTS: The contractor shall discuss the progress of the Work Assignment and any issues in periodic teleconference calls, approximately on a bi-weekly basis (every other week) with the WAM. The EPA WAM will schedule these teleconference calls.

L. QUALITY ASSURANCE SURVEILLANCE PLAN: Per Contract requirements

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-07				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name cVOCs				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW Section 3.1					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						750				
Total:						750				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Kesha Forrest <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 202-564-3632 FAX Number:				
Project Officer Name Ronald Coleman <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8491 FAX Number:				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Noelle Mills <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2171 FAX Number:				

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-07**

A. TITLE: Continuation of Occurrence Support for Carcinogenic Volatile Organic Compounds (cVOCs)

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

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ALTERNATE WORK ASSIGNMENT MANAGER:

Dana Erickson
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E-mail: erickson.dana@epa.gov

D. BACKGROUND:

EPA has initiated the process to develop a National Primary Drinking Water Regulation (NPDWR) for a group of carcinogenic volatile organic compounds (cVOCs). The group will include revisions to previously regulated cVOCs as well as unregulated cVOCs. This group preliminarily included: benzene; carbon tetrachloride; 1,2-dichloroethane; 1,2-dichloropropane; dichloromethane; tetrachloroethylene (PCE); trichloroethylene (TCE); vinyl chloride; aniline; benzyl chloride; 1,3-butadiene; 1,1-dichloroethane; nitrobenzene; oxirane methyl (propylene oxide); 1,2,3-trichloropropane; and urethane. After the initial review of the physical and chemical properties of the preliminary list, five chemicals were removed: aniline, benzyl chloride, nitrobenzene, oxirane methyl, and urethane. Two additional chemicals were added to the list: 1,1,1,2-tetrachloroethane and 1,1,2,2-tetrachloroethane. The contaminants included in the group of cVOCs are subject to changes as a result of additional analysis.

EPA proposes to regulate these contaminants as a group rather than individually to provide greater public health protections and allow utilities to efficiently plan for improvements so they can effectively address the proposed group, and also be in a better position to address emerging cVOCs potentially in the future. EPA plans to evaluate health effects, analytical feasibility, treatment feasibility, and occurrence in drinking water systems. EPA will also evaluate the affordability of treatment technologies to remove cVOCs from drinking water and

examine the costs and benefits of alternative group Maximum Contaminant Levels (MCLs). The Agency will consult with the Science Advisory Board, the National Drinking Water Advisory Council, State and Tribal drinking water programs, and other interested stakeholders on a number of issues relating to the cVOCs group regulation. Currently, EPA's official projected date to publish the proposed regulation and analyses for public review and comment is Fall 2014. EPA will consider public comments and expects to promulgate a final regulation within 18 months of the proposal.

NPDWRs are set after consideration of peer-reviewed science, including frequency and level of contaminant occurrence in drinking water, adverse health effects from exposure to the contaminant and analytical methods feasibility. Safe Drinking Water Act (SDWA) Sections 1412(b) (1)-(6) and (15) describe requirements for regulating drinking water contaminants which include the following:

- Establishing a Maximum Contaminant Level Goal (MCLG) and promulgating a NPDWR,
- Determining the "feasible" level for the MCL,
- Estimating the health risk reduction costs and benefits of alternative MCLs,
- Determining if benefits justify the costs at the feasible level,
- Determining if affordable compliance technologies are available to small systems, and
- Evaluating small system affordability.

The requirements for promulgating NPDWRs apply to revisions to regulated contaminants as well as new standards for unregulated contaminants. However, the criterion for making a determination to regulate contaminants in accordance with SDWA is different.

Unregulated Contaminants - Section 1412(b)(1)(A) of the SDWA requires that the following criteria must be met in order to make a determination to regulate a contaminant:

- the contaminant may have an adverse effect on the health of persons,
- the contaminant is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern, and
- in the sole judgment of the Administrator, the regulation of the contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.

Once EPA makes a determination to regulate a contaminant in drinking water, SDWA Section 1412(b)(1)(E) requires that EPA issue a proposed NPDWR within 24 months and a final NPDWR within 18 months after the proposal. By notice in the Federal Register, the deadline for the final NPDWR may be extended up to 9 months.

Regulated Contaminants - SDWA Section 1412(b)(9) requires review and revision, as appropriate, of current NPDWRs at least every 6 years. Revision of currently regulated

contaminants must maintain, or provide for greater protection of public health. Once EPA decides to revise a NPDWR for a regulated contaminant, the requirements for promulgating a NPDWR must be met.

This work assignment (WA) is a continuation to work assignment 0-07, under the same Cadmus Contract EP-C-12-023 and includes tasks that will help EPA to provide an occurrence analysis for the unregulated cVOCs for internal agency review and provide analysis to support a regulatory determination for a cVOCs group. In order to support EPA, the contractor's efforts will involve the following, as needed:

- Retrieval of references for occurrence/exposure data identified in the Contaminant Candidate List (CCL) data dossier for each of the CCL 3 cVOC chemical contaminants.
- Conducting literature searches to identify additional information on occurrence data/exposure, release and physical properties.
- Preparing materials (e.g., contaminant information sheets, occurrence tables) that will be used to assist EPA in option selection, communication with management, stakeholder gatherings, and identifying cVOC co-occurrence.
- Collecting documents or other items related to occurrence and exposure as needed.
- Evaluation of CCL 3 cVOC contaminants in light of the literature search results and papers retrieved to help assess which contaminants have the appropriate data to make a regulatory determination.
- Providing workgroup and public meeting support.

Developing draft supporting documents (e.g., Analysis of Occurrence Data for the Unregulated cVOCs) EPA will analyze and make regulatory determinations on the unregulated cVOCs CCL 3 list as part of the group regulation. In order to make scientifically sound and legally defensible regulatory determinations, the Office of Ground Water and Drinking Water (OGWDW) must gather and analyze information to support these decisions. OGWDW must evaluate when and where these contaminants occur, the extent of exposure, and the risk to public health. EPA will also determine the appropriate measure for protecting public health, and the impact of potential regulations.

Occurrence assessments are a necessary component of the listing and regulatory decision making process. Information on the distribution of contaminant occurrence levels in public water supplies of various source and size categories provides OGWDW with a basis for estimating the number of systems and the size of the affected population experiencing contaminant levels exceeding a known health effect level. Occurrence estimates are used to develop exposure assessments and, subsequently, the contribution of drinking water, relative to other sources of exposure, to total intake. The exposure information will provide the basis for the health assessment. The contractor shall continue the process

of collecting and analyzing occurrence data (primary and/or supplemental) on the unregulated cVOC contaminants for the rulemaking effort as described by the tasks in this work assignment.

The contractor has supported EPA through WA 4-18 Support for Regulatory Determination 3 and WA 4-34 and WA 5-34 of Contract EPA-C-07-022. Since some of the unregulated cVOCs have been evaluated under WA 4-18, 4-34 and 5-34, the contractor shall consider and utilize the work completed or started as part of those work assignment.

E. QUALITY ASSURANCE:

Tasks 1 and 2 in this work assignment require the use of secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under task 0 of WA_0-07, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). Under WA 0-07, the contractor submitted a SQAPP. The SQAPP for WA 0-07 was approved by EPA on January 23, 2013. The project specific quality assurance requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-07. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under task(s) 0 of WA 0-07. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs` broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract

Level (QAPP) accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via e-mail.

Deliverables: Work plan and monthly progress reports.

Task 1 - Technical Analysis of Occurrence and Co-Occurrence Data

Task 1a- Under WA 4-34, WA 5-34, and WA 0-07 the contractor evaluated and analyzed occurrence data for CCL 3 unregulated cVOC contaminants along with the co-occurrence with regulated cVOCs. Under WA 5-34, the contractor provided draft tables (spreadsheet format) which summarize the available data on cVOCs from Six year 2, Unregulated Contaminant Monitoring (UCM), National Water-Quality Assessment (NAWQA) Program, Groundwater Ambient Monitoring Assessment (GAMA), and the Environmental Working Group. Upon receipt of comments from the EPA WAM on the draft tables previously delivered, the contractor shall provide final tables that summarize the available data.

Deliverables:

Final tables for contaminants with Six Year 2, UCM, NAWQA, GAMA and EWG data (draft tables delivered under WA 5-34)

Task 1b Under WA 5-34, the contractor also provided an approach for evaluating and analyzing additional information on cVOCs occurrence, such as co-occurrence maps and entry point analyses, etc. The WAM will provide the contractor with technical direction for any of the additional cVOC occurrence analyses listed as part of the cVOC Action Plan (a list of potential cVOC analyses previously delivered under WA 5-34) that may be needed. After comments are received from WAM on the draft cVOC occurrence or co-occurrence analysis, the contractor shall submit final cVOC occurrence or co-occurrence analysis.

Deliverables:

Draft cVOC occurrence or co-occurrence analysis

Final cVOC occurrence or co-occurrence analysis

Task 2: Development of an Unregulated cVOCs Occurrence Document

Under WA 5-34 EPA received draft chapters (including introductory, individual chemical, and data source chapters) for the unregulated cVOCs occurrence document. Under WA 0-07 the EPA WAM sent the contractor comments on these chapters. A complete draft document is expected to be delivered to EPA at the end of the WA 0-07 performance period. The draft shall include narrative chapters describing the unregulated occurrence data analyses and co-

occurrence analysis for cVOCs. The draft document shall also include a description of the limitations of the databases that serve as the basis of the contaminant analyses. The contractor shall identify data coverage, highlight and address data quality issues encountered, establish basic data quality parameters, and provide an initial assessment of occurrence and exposure of the specified cVOC contaminants in the document. The document shall also include a comparison analysis of older Unregulated Contaminant Monitoring (UCM) data and more recent Six Year Review data.

The draft document will be reviewed by the EPA WAM and the workgroup under the performance period of WA 1-07. The EPA WAM will provide written comments on the draft document to the contractor. The contractor shall incorporate the comments and send a revised draft and a final document to the EPA WAM. There shall be up to three draft documents.

Deliverables:

Revised draft unregulated cVOCs occurrence document

Final unregulated cVOCs occurrence document

Task 3: Meeting Support

The contractor shall participate (primarily by phone) to select cVOC workgroup meetings and/or other meetings related to the work being done under this work assignment. For some designated meetings, the contractor shall prepare summaries. The EPA WAM will designate which meetings the contractor shall be available for and which meetings shall require meeting summaries in technical direction. The work group meetings are typically 1 hour long. For planning purposes, the contractor shall assume support will be requested for approximately 8-10 meetings and summary support for 4-5 meetings.

In addition to preparing meeting summaries for designated work group meetings, the contractor shall provide pre-meeting support such as preparing and distributing meeting agendas and preparing and distributing meeting materials. The contractor shall also develop presentation slides and/or give presentations at one or more work group meetings and/or public meetings. The contractor shall also develop presentation slides for an EPA required science consultation such as the Science Advisory Board (SAB) panel, which will be described in technical direction from the EPA WAM. In such cases, the contractor shall develop draft, interim, and final versions of presentation slides or materials. The contractor shall review and evaluate all meeting summaries, presentations, or meeting materials prior to submittal to EPA to ensure accuracy and technical soundness.

For planning purposes, the contractor shall assume no more than one public meeting and one science consultation meeting to be in the Washington, DC area and/or via webcast/teleconference. EPA does not expect the total cost of any individual meeting outlined in this work assignment to exceed \$25,000.

Deliverables:

Meeting Summaries

Draft, interim, and final versions of meeting presentations and/or meeting materials.

G. SCHEDULE OF DELIVERABLES:

Task	Deliverable	Due to EPA	No of Copies/Medium
Task 0: Work Plan and Monthly Progress Reports			
	Work Plan, monthly progress and financial reports	Per contract	
Task 1 - Technical Analysis of Occurrence Data			
Task 1a	Final tables for contaminants with Six Year 2, UCM, NAWQA, GAMA and EWG data (draft tables delivered under WA 5-34)	Per technical direction	(1 copy to the EPA WAM)
Task 1b	Draft cVOC occurrence or co-occurrence analysis	Per technical direction	(1 electronic copy to the EPA WAM)
	Final cVOC occurrence or co or co-occurrence analysis	Within 2 weeks after receipt of technical direction from the EPA WAM	(1 electronic Micro soft software Word version and 1 electronic Section 508 compliant version to the EPA WAM)
Task 2: Development of an Occurrence Document for the Unregulated cVOCs			
	Revised draft unregulated cVOCs occurrence document	Per technical direction	(1 electronic copy to the EPA WAM)
	Final unregulated cVOCs occurrence document	Within 2 weeks after receipt of technical direction from the EPA WAM	(1 electronic Micro soft Word version and 1 electronic Section 508 compliant version to the EPA WAM)
Task 3: Meeting Support			
	Meeting Summaries	Within one week of each meeting.	(1 electronic copy to the EPA WAM)
	Draft, interim, and final versions of presentations and/or meeting materials	Within 2 weeks after receipt of technical direction from the EPA WAM.	(1 electronic Micro soft Word version and 1 electronic Section 508 compliant version WAM.

H. LEVEL OF EFFORT ESTIMATES:

EPA estimates 750 hours will be required to complete the tasks identified in this Performance Work Statement.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

The Contractor shall not travel or commit to travel without EPA's approval. All travel shall first be discussed with the EPA WAM and authorized in writing by the EPA Project Officer.

K. SPECIAL REPORTING REQUIREMENTS:

The contractor shall provide status updates for each task on a weekly or bi-weekly basis, either through a meeting with the EPAWAM or over the telephone or email as needed.

L. QUALITY ASSURANCE SURVEILLANCE PLAN:

Per Contract requirements.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-08				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Lead and Copper Rule				
Contractor CADMUS GROUP, INC., THE						Specify Section and paragraph of Contract SOW 1.2, 1.10, and 2.4.1				
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						1,500				
Total:						1,500				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name MattM Robinson						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 202-564-2802				
						FAX Number:				
Project Officer Name Ronald Coleman						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8491				
						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Robert A. Knecht						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 513-487-2043				
						FAX Number:				

**Performance Work Statement
Contract EP-C-12-023
The Cadmus Group, Inc.
Work Assignment 1-08**

A. TITLE: Economic Analysis for Lead and Copper Rule (LCR) Proposed Long-Term Regulatory Revisions

B. ESTIMATED PERIOD OF PERFORMANCE: Effective Date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

Matt M. Robinson
US EPA, Room 2227N
1200 Pennsylvania Ave., NW
MC 4607M
Washington, DC 20460
Tel: (202) 564-2802
Fax: (202) 564-3760
e-mail: robinson.mattm@epa.gov

ALTERNATE WORK ASSIGNMENT MANAGER:

Lameka Smith
US EPA, Room 2316D
1200 Pennsylvania Ave., NW
MC 4607M
Washington, DC 20460
Tel: (202) 564-1629
Fax: (202) 564-3760
e-mail: smith.lameka@epa.gov

D. BACKGROUND INFORMATION:

The Safe Drinking Water Act (SDWA), as amended in 1996, directs EPA to review existing National Primary Drinking Water Regulations (NPDWRs) at least once every six years, and revise them if appropriate. The Six Year Review of existing drinking water regulations considers key elements in the areas of health effects, technology, occurrence, and analytical capacity in reviewing existing drinking water regulations and making decisions regarding appropriateness of regulatory revision.

EPA is currently in the process of evaluating potential changes to the existing lead and copper rule. These regulatory changes may consist of modifications to the tiering criteria for lead and copper sampling sites, changes to requirements for lead service line replacement, changes and/or additions to existing corrosion control treatments, modifications to existing water quality parameters, and school sampling programs to assess water quality in the school/daycare setting.

The purpose of this work assignment is to finalize the economic and cost/benefit, Lead Free, EJ, and other needed analyses to support a proposed rulemaking which revises the current LCR. EPA anticipates proposing changes to the existing LCR in 2013. Tasks under this work assignment will consist of finalizing tasks from Cadmus Contract EP-C-08-023, WA 0-08 (hereinafter, "WA-

0-08”): revising and finalizing the economic analysis and administrative support document; analyses to support specific statutes and executive orders for the lead and copper proposed long-term revisions. Tasks under this work assignment will also consist of evaluating the potential economic impacts of the Reduction of Lead in Drinking Water Act of 2011.

E. QUALITY ASSURANCE:

This work assignment is a continuation of WA 0-08. The tasks from 0-08 have been re-ordered for this work assignment. WA 0-08 Tasks 1, 2, and 5 are contained within Task 1 of this work assignment. WA 0-08 Task 4 coincides with Task 3 of this WA, and WA 0-08 Task 3 coincides with Task 2 of this work assignment.

Tasks 1, 2, and 3 of this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed for Tasks 1, 2, 3, 4, and 5 of WA 0-08, consistent with the Agency’s Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTIONS:

Task 0: Work Plan and Monthly Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor’s key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-08. The work plan shall explain that collection, use, and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under tasks 1, 2, 3, 4 and 5 of WA 0-08. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP] accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via email.

Deliverables: Work plan, quality assurance project plan, monthly progress and financial reports.

Task 1: Economic Analysis, Background and Supporting Documents

The contractor shall revise and edit the final Economic Analysis (EA) document per EPA comments and technical direction. The EA shall incorporate all chapters developed under Tasks 2-7 of WA 0-08 as well as the additional Chapter summarizing the costs and benefits of lead

service line replacement (which was outlined as technical direction under WA 0-08), supporting information developed as part of Task 8 of that work assignment, as directed by the EPA WAM.

The document will be clear, concise, well-organized, and complete. At a minimum, this will continue to incorporate all of the topics from WA 0-08 in order to prepare the document for Final Agency Review, and edit the document based on EPA and other stakeholder comments:

- Executive Summary, Acronyms list, and table of contents
- Chapters 1-8 (Introduction, Need for the Rule, Regulatory Revisions and Consideration of Regulatory Alternatives, Baseline Drinking Water System Characteristics, Cost Analysis, Health Risk Reductions and Indirect Costs, Benefits and Costs of LSLR [this is a new chapter developed under WA 0-08], Economic Impact Analysis)
- References (at the end of each chapter)
- Appendices
- Other revisions or additions as given in technical direction.
- Tables and other supporting information for the Federal Register Notice

In revising the EA, the contractor shall, if necessary, revise and edit estimates of the burden on water systems and states for complying with the rule to include all Information Collection Request (ICR) associated burden. In addition, the contractor shall edit and revise the stand-alone document specifically on the ICR associated burden for EPA to submit to the Office of Management and Budget (OMB).

The contractor shall also edit and revise, where necessary, the Initial Regulatory Flexibility Analysis (IRFA) in support of the requirements under the Regulatory Flexibility Act. Per WA 0-08, this document discusses the anticipated economic impacts that the proposed revisions will have on small water systems and describe possible significant alternatives to the proposed revisions that achieve the same outcome while minimizing the potential impact on small entities.

In accordance with 5 USC section 603, and continuing from WA 0-08, the contractor shall ensure the inclusion the following information in the IRFA:

- Description of the reasons why action by the Agency is being considered (5 USC section 603(B)(1)),
- Succinct statement of the objectives of, and legal basis for, the proposed/revised rule (5 USC section 603(b)(2)),
- Description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (5 USC section 603(b)(3)),
- Description of the projected reporting, record keeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirements and the type of professional skills necessary for preparation of the report or record (5 USC section 603(b)(5), and
- Descriptions of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impacts of the proposed rule on small entities.

The contractor shall make edits and changes to the Draft Economic Analysis document, ICR, and IRFA as directed by the EPA WAM, and shall prepare, edit, and deliver all supporting documents as directed by the EPA WAM. The contractor shall make the Economic Analysis document and other documents as directed by the EPA WAM to be 508 compliant.

The final EA, final ICR document, and final IRFA shall be clear, concise, well-organized, and complete. The final version of the chapter and support documents shall incorporate all EPA WAM comments on the draft versions.

Deliverables: Final EA document; final ICR document; final IRFA document.

Task 2: Additional Analyses

EPA anticipates that additional analyses may be required for EPA to fully respond to OMB comments on the proposed regulation. Specific analyses, calculations, and revisions will be specified by the EPA WAM via written technical direction.

These additional analyses may include, but may not be limited to:

- Analyses to support the Small Business Regulatory Enforcement Fairness Act (SBREFA) process and small entity analysis
- Analyses to respond to Small Business Administration , and OMB comments
- Environmental Justice analysis
- Analyses to support changes to the LCR, such as copper waiver data and related analyses
- Other analyses as given in technical direction

The WAM will provide the contractor with any new data or information to support updating, revising, and/or undertaking additional analyses in response to OMB comments on the final rule. The contractor shall incorporate any new analyses into the final deliverables as directed by the EPA WAM.

The additional analyses shall be clear, concise, and well-organized. At a minimum, the analyses shall address all requested information in EPA's written technical direction. For those items that cannot be addressed, the contractor shall provide a written explanation of why certain factors cannot be included. The contractor shall also notify EPA, within three business days, if the requested information cannot be completed within the time period specified

Deliverables: Additional analyses.

For planning purposes, the contractor shall assume this task will consume not more than 10% of the overall effort will be required for this task.

Task 3: Reduction of Lead in Drinking Water Act of 2011 (Lead Free Act)

The contractor shall edit and revise the analysis of the potential economic impacts of the Reduction of Lead in Drinking Water Act of 2011 developed under WA 0-08 based on EPA comments. This analysis shall be a separate supporting document for the LCR Long-term Revisions. The document shall be clear, concise, well-organized, and complete.

At a minimum, the analysis will continue to include:

- A brief summary of the Reduction of Lead in Drinking Water Act of 2011, including a discussion and comparison of the changes from the current Law.
- A characterization of the potentially affected market
- Potential economic impacts of new labeling and/or product stamping
- Economic impacts to small entities
- A discussion of applicable executive orders.

Deliverables: Final Lead Free Act Cost Analysis.

Task 4: Meeting and Briefing Support

The contractor shall provide support for Lead and Copper Rule, Long-term Revisions Team, sub-team, and/or workgroup meetings/conference calls by producing written notes of the meeting, as directed by the WAM in technical direction. The notes shall include a list of meeting participants; major issues discussed; record of decisions made; and action items. For work planning purposes, the contractor should assume a maximum of four meetings/conference calls during the period of performance. The contractor should assume meetings will be in the Washington D.C. area and that only local travel will be required.

While EPA does not anticipate the contractor's support to any individual meeting, or other event (conference, workshop, symposium, retreat, seminar or training) incurring \$25,000 in total cost, the contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager if it anticipates support to such event reaching this cost. Event expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

In conjunction with other activities being conducted under this PWS, after receiving written technical direction from the WAM, the contractor shall prepare visual aids and briefing materials subject to the Office of Federal Procurement Policy (OFPP) video requirements and the limitations of printing clause. Using content provided by the WAM or developed under other tasks in this work assignment, the contractor shall produce draft presentations using such techniques as slides, overheads, graphs, charts, CD slide presentations or written materials, and after incorporating written comments from the WAM, shall finalize the materials. As specified in written technical direction from the WAM, the contractor shall draft fact sheets, announcements, and other documents to support communicating specific information about the LCR LTR to Agency management, water systems, states, industries, other stakeholders, and the public. Materials prepared under this paragraph shall be submitted in draft for review and approval to the WAM. For purposes of planning, the briefing materials may require five graphical or tabular slides with one or two days' written advance notice.

Also for planning purposes, the contractor shall assume not more than 10% of the overall effort will be required for this task.

Deliverables may include: Power point slides; meeting summaries; briefing and talking points; cost, Benefit, demographic information; and/or other supporting material.

G. SCHEDULE OF DELIVERABLES:

The contractor shall submit all deliverables as unbound hard copies and in OGWDW compatible software (e.g., Microsoft Word/Excel). Unless otherwise directed by the EPA WAM in writing, the contractor shall deliver all other products electronically. All due dates below are calendar dates, weeks, or months unless otherwise specified, and are calculated in business days.

TASK	TASK DESCRIPTION	DEADLINES
0	Work plan and monthly progress reports	Per contract Within 5 days of WA issuance
1	Final EA document (508 compliant); final ICR document (508 compliant); final IRFA document (508 compliant).	Within 2 weeks of receipt of EPA WAM written comments on draft(s)
2	Draft Additional Analyses	As specified in written technical direction from EPA WAM
	Final Additional Analyses	As specified in written technical direction from EPA WAM
3	Final Lead Free Act Cost Analysis (508 compliant)	As specified in written technical direction from EPA WAM
4	Power point slides; meeting summaries; briefing and talking points; cost, Benefit, demographic information; and/or other supporting material.	As specified in written technical direction from EPA WAM

H. LEVEL OF EFFORT ESTIMATE: EPA estimates that 1500 hours will be required to complete the tasks outlined.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL: None.

K. SPECIAL REPORTING REQUIREMENTS: None.

L. Quality Assurance Surveillance Plan: Per contract requirements.

M. MISCELLANEOUS

Software Application Files and Accessibility

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and §

1194.22 Web-based intranet and internet information and applications. See:
<http://www.section508.gov/>

Preferred text format:	MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format:	Power Point, Office 2003 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-09				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			Protect. Action Guide for DW				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW Section 1.6, 1.6.1, 2.1.1, 2.1, 5.1					
Purpose:					Period of Performance					
<input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					From 05/01/2013 To 04/30/2014					
Comments:										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A. SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						360				
Total:						360				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Samuel Hernandez						Branch/Mail Code:				
						Phone Number 202-564-1735				
_____ (Signature) (Date)						FAX Number:				
Project Officer Name Ronald Coleman						Branch/Mail Code:				
						Phone Number: 202-564-8491				
_____ (Signature) (Date)						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
						Phone Number:				
_____ (Signature) (Date)						FAX Number:				
Contracting Official Name Robert A. Knecht						Branch/Mail Code:				
						Phone Number: 513-487-2043				
_____ (Signature) (Date)						FAX Number:				

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-09**

A. TITLE: Scope of Protective Action Guides for Drinking Water

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER: Samuel Hernandez
MC: 4607M
1200 Pennsylvania Ave., NW
Washington, DC 20460
202-564-1735

ALTERNATE WORK ASSIGNMENT MANAGER: Jerry Ellis
MC: 4607M
1200 Pennsylvania Ave., NW
Washington, DC 20460
202-564-2766

D. BACKGROUND:

The U.S. Environmental Protection Agency (EPA) is in the process of developing a Manual to assist public officials in planning for emergency response to radiological incidents. A radiological incident is an event or a series of events, deliberate or accidental, leading to the release or potential release into the environment of radioactive materials in sufficient quantity to warrant consideration of protective actions. The Manual will provide radiological protection criteria for application to all incidents that would require consideration of protective actions.

During an incident with an uncontrolled source of radiation, protection of the public from unnecessary exposure to radiation may require some form of intervention that will disrupt normal living. Such intervention is termed a protective action. Examples of protective actions include: evacuating an area; sheltering-in-place within a building or protective structure; administering potassium iodide (KI) as a supplemental action; acquiring an alternate source of drinking water; interdiction of food/milk.

The Manual will provide recommended numerical protective action guides (PAGs) for the principal protective actions available to public officials during a radiological incident. A PAG is defined as the projected dose to an individual from a release of radioactive material at which a specific protective action to reduce or avoid that dose is recommended. PAGs do not establish an acceptable level of risk for normal, nonemergency conditions, nor do they represent the boundary between safe and unsafe conditions. The PAGs are not legally binding regulations or standards and do not supersede any environmental laws.

The agency issued a draft PAGs manual on April 2013, and requested comments on the proposed actions. A final manual is expected to be issued by 2014.

E. QUALITY ASSURANCE:

Tasks 1, 2 and 3 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under Tasks 0 of WA 0-09, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The Contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the Contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractor(s) are outside the local metropolitan area, the Contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-09. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under tasks 1, 2 and 3 of WA 0-09. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP] accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO.

Deliverables: Work plan, monthly progress reports

Task 1: Literature Search to identify Scope of Actions

The contractor shall support EPA's development of options to be considered for drinking water protective action guides during nuclear incidents. To accomplish this, the contractor shall conduct a literature search and compile a list of protective actions for drinking water that have been implemented by other U.S. Federal Agencies, or international organizations (i.e. World Health Organization, International Atomic Energy Agency (IAEA, ect.) in planning for emergency situations involving radioactive contaminants.

EPA projects that 50% of the total effort will be required for this task.

With the information gathered the Contractor shall prepare a white paper that identifies the criteria that was used as basis for selecting the different trigger levels for Protective Actions in drinking water. The report shall also contain any rationale if applicable on how the health effects of radiation and the associated risk of different dose levels were considered during the development of the protective action options.

For planning purposes, the contractor shall assume the white paper will not exceed 50 pages

Deliverables:

- List of protective actions for drinking water and associated radiation trigger levels currently recommended to respond to emergency nuclear incidents.
- Draft white paper summarizing scope of protective actions and their associated trigger levels and technical rationale.
- Final white paper summarizing scope of protective actions and their associated trigger levels and technical rationale.

Task 2: Report on available actions and recommendations

The contractor shall prepare a report that identifies options for EPA to consider as Protective Action Guides for drinking water during nuclear incidents. The report should include an analysis of the risk levels to different sensitive subpopulations (i.e. children, pregnant women) associated with different PAG trigger levels. The report should also contain a brief explanation of how the health effects of radiation at different trigger levels could be clearly and effectively communicated to the public.

For planning purposes, the contractor shall assume this report will not exceed 30 pages

Deliverables:

- Draft Table of Contents of Report
- Draft Report on PAG options
- Final Report on PAG options

Task 3: Identify concerns/ vulnerabilities regarding potential for distribution system contamination

Contractor shall gather information and prepare a white paper about potential concerns and vulnerabilities regarding distribution system contamination (scaling & others) resulting from distribution of water with high concentration of radionuclides of concern.

EPA projects that 10% of the total effort for this assignment should be spend completing this task.

For planning purposes, the contractor shall assume the white paper will not exceed 10 pages

Deliverables:

- Final paper summarizing potential concerns and vulnerabilities of distribution systems being contaminated in the aftermath of a nuclear radiation incident.

G. SCHEDULE OF DELIVERABLES:

Task	Deliverable	Due to EPA
0	Work Plan	Per Contract requirements
0	Monthly Progress Reports	Per Contract requirements
1	List of protective actions for drinking water and associated radiation trigger levels currently recommended to respond to emergency nuclear incidents.	1 month from work assignment issuance
1	Draft white paper summarizing scope of protective actions and their associated trigger levels and technical rationale	2 months from work assignment issuance
1	Final white paper summarizing scope of protective actions and their associated trigger levels and technical rationale (508 compliant)	1 month from WAM comments
2	Draft Table of Contents of Report	2 months from work assignment issuance
2	Draft Report on PAG options	3 months from work assignment issuance
2	Final Report on PAG options (508 compliant)	1 month from WAM comments
3	Final paper summarizing potential concerns and vulnerabilities of distribution systems being contaminated in the aftermath of a nuclear radiation incident (508 compliant)	1 month from WAM comments on Draft paper

H. LEVEL OF EFFORT ESTIMATES:

EPA estimates that the total effort to complete all tasks outlined will require 360 hours.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

No travel is anticipated as part of this effort.

K. SPECIAL REPORTING REQUIREMENTS: None

L. QUALITY ASSURANCE SURVEILLANCE PLAN:

Per Contract As outlined in the Contract.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-10				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014			Title of Work Assignment/SF Site Name				
			Base Option Period Number 1			Support for Perchlorate				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW Section 1.2					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 05/01/2013 To 04/30/2014					
Comments:										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> (Max 2) Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						2,910				
Total:						2,910				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Clifton Townsend						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 202-564-1576				
						FAX Number:				
Project Officer Name Ronald Coleman						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-8491				
						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Robert A. Knecht						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 513-487-2043				
						FAX Number:				

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-10**

A. TITLE: Support for the NPDWR on Perchlorate: Regulation of Perchlorate Proposed and Final Rules

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

Cliff Townsend
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ALTERNATE WORK ASSIGNMENT MANAGER:

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D. BACKGROUND:

Perchlorate was included on the first (1998), second (2005), and third (2009) Contaminant Candidate Lists (CCLs) and was monitored under the first Unregulated Contaminant Monitoring Regulation (UCMR 1) (2001-2003). The nationally representative, high quality monitoring data from the UCMR 1 supported a formal assessment of perchlorate occurrence in public drinking water systems initiated under the second Regulatory Determination (RegDet2) process (2005). To support the RegDet2 regulatory evaluation of perchlorate, Cadmus conducted numerous occurrence analyses relative to multiple concentration thresholds of potential concern using primarily the UCMR1 data. The occurrence analyses characterized annual mean perchlorate occurrence (to inform potential chronic health concerns) and occurrence based on single detections (to inform potential sub-chronic health effect concerns). Cadmus developed a comprehensive perchlorate occurrence document that presented the occurrence analyses and related findings to support EPA's RegDet2 regulatory review. EPA published its preliminary RegDet2 determinations on eleven of the CCL2 contaminants in May 2007, but noted then that the Agency intended to evaluate perchlorate on a separate schedule.

In October 2008, EPA issued a preliminary determination not to regulate perchlorate. In August 2009, the final determination was postponed and a "Perchlorate Supplemental Request for Comments" was published. In February 2011, based on the comments received and review of continuing research, EPA determined that perchlorate did meet the SDWA criteria for regulating a contaminant. This positive regulatory determination of perchlorate represents the first unregulated contaminant to advance from the CCL through RegDet to development of a National Primary Drinking Water Regulation (NPDWR).

This work assignment is a continuation of work conducted in several work assignments, including WA 0-10 under Contract EPC-07-012-023. Under the previous work assignments, Cadmus provided EPA with occurrence and preliminary exposure analyses for the regulatory determination process, revised an occurrence model to generate input to EPA's SafeWater modeling work (used to estimate treatment costs), conducted preliminary Environmental Justice assessments for perchlorate occurrence, provided support at work group and stakeholder meetings. The work also included data collection, preparation of a comprehensive perchlorate occurrence report, and other technical, analytical, and programmatic support tasks.

This work assignment provides support for the occurrence-related assessments required for the initial NPDWR development. This work includes perchlorate occurrence analyses to support: rule-related costs analyses and development of the Economic Analysis Document; exposure and risk assessments, and; other technical analyses and assessments as part of development of the proposed perchlorate rule. Perchlorate Work Group Meeting support will also be conducted under this work assignment. The Cadmus Project Manager will maintain close communications with the EPA Work Assignment Manager (WAM) regarding work scheduling, deliverables established through Written Technical Direction, and project resources. The Cadmus manager will discuss with the WAM if a particular task or tasks potentially require more resources than estimated.

E. QUALITY ASSURANCE:

Tasks 2-5 in this work assignment require the use of primary and/or secondary data under this WA. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under WA 0-10, consistent with Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified in Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The Contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the Contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the establishment of the objects and processes necessary to deliver results in accordance with EPA's Section 508 requirements and policies where applicable. If a subcontractor(s) is proposed and subcontractor(s) are outside the local metropolitan area, the Contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 01-10. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed during WA 0-10. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and the WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level QAPP accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via e-mail.

Deliverables: Work plan and monthly progress and financial reports

Task 1: Perchlorate Work Group Meeting Support and Facilitation

The contractor shall support development of pre-meeting materials, attend meetings, take meeting notes, and prepare summaries of the meetings. All final meeting materials must be 508 compliant in order to post them on the web. Some meetings, designated in advance by the EPA WAM, will require more detailed meeting summaries. For all meetings, the contractor shall provide pre-meeting support such as preparation and distribution of meeting agendas and meeting background materials as directed by the EPA WAM through written technical direction.

EPA anticipates up to six meetings held within the DC Metro area. For four of those meetings, the contractor should plan for preparation and submission of more detailed meeting summary notes. Senior staff involved in the perchlorate project work will provide senior technical review of all summary notes prior to submission to EPA. For budgeting purposes, Cadmus anticipates junior staff taking notes may attend the meetings on local travel (from within the Washington D.C. area) and senior staff will participate in the meetings via conference call or webinar. Senior staff will also oversee development of all meeting notes.

In addition, the contractor shall provide a senior staff member with appropriate technical experience and background on the perchlorate project work to facilitate up to four two-day workgroup meetings or related meetings at EPA offices in Washington, D.C. For budgeting purposes, Cadmus anticipates providing pre-meeting support and facilitation at four two-day meetings at EPA offices in Washington, D.C., with travel from the Boston area by one senior Cadmus staff member and with local travel (within the Washington D.C. area) for the second Cadmus staff member.

Task 2: Technical Analyses

Cadmus will conduct various perchlorate occurrence analyses in support of EPA perchlorate rule development. These analyses, consistent with occurrence analyses conducted previously under the preceding related Work Assignments, may include occurrence analyses stratified by system size and type, by source water type, and by geography (e.g., by groups of states). Some analyses may require acquisition and use of perchlorate occurrence data to complement (or supplement or combine with) the perchlorate occurrence analyses based on the UCMR1 data that will be conducted under Task 4 of this Work Assignment. Cadmus anticipates acquisition of this additional data from other agencies, associations, states, or perhaps the published literature. Other analyses may include occurrence-related aspects of risk assessment, human exposure, perchlorate treatment, and/or perchlorate laboratory analytical methods.

For planning purposes, the contractor may assume preparing:

- two documents regarding risk, exposure, treatment or methods;
- two documents or other briefing/communication materials for stakeholder meetings and workgroup meetings; and
- five documents that present occurrence and other technical or analytical findings to support EPA's consideration of policy options and decisions related to perchlorate rule development.

The contractor should assume that draft and final versions for these nine documents will be prepared under this subtask, with each document approximately 10-20 pages in length. All final documents intended for either web posting or inclusion in the federal docket must also be 508 compliant. Clarifying

details of the research and documents briefly described above will be specified in written technical direction from the EPA WAM.

Task 3: Support EPA's Preparation of the Economic Analysis Document

EPA's Economic Analysis includes national costs and benefits of potential rule options, encompassing a wide range of components. These cost estimates may be disaggregated or stratified and evaluated in terms of impact on households, public water systems (PWSs), etc. Benefits estimates will reflect consideration of protection of public health, based on contaminant occurrence analysis and risk assessment.

Upon written technical direction from the EPA WAM, the contractor shall provide detailed occurrence analyses, research on supplemental occurrence data, and other support for EPA's development of the Economic document and any supporting materials. It is anticipated that the primary occurrence analyses will be based on the perchlorate data collected under UCMR 1 continuing the occurrence work conducted under the preceding perchlorate occurrence Work Assignments. Various occurrence analyses may be needed to support the national costs and benefits for rule options as part of this Economic support work. Analyses may be stratified by PWS size, source water type, system type, etc.

For planning purposes the contractor should assume no more than four requests for Economic Analysis support. All final documents intended for either web posting or inclusion in the federal docket must also be 508 compliant.

Task 4: Occurrence Analysis Based on UCMR 1

Continuing work conducted under WA 0-1 the contractor shall (as directed by the EAP WAM) refine the statistical model and generated perchlorate occurrence distribution parameters that are used as input to EPA's SafeWater modeling of perchlorate treatment costs. Upon the revision being deemed acceptable by the EPA WAM, the contractor shall provide revised distribution parameters for use in EPA's SafeWater model and any necessary written documentation describing the modeling (including descriptions of the model, modeling code, assumptions made, model and/or data limitations, etc.).

The contractor should assume no more than two revisions to the statistical model will be required. All final documents intended for either web posting or inclusion in the federal docket must also be 508 compliant.

Task 5: Risk Assessment

The contractor shall support the development of EPA's national health risk assessment for perchlorate in public drinking water. The risk assessment will include an estimate of the expected reduction of national health risks associated with promulgation of an NPDWR for perchlorate. The assessment will include an analysis of risks resulting from drinking water occurrence of perchlorate with consideration of both acute/sub-chronic and chronic exposure as well as acute/sub-chronic and chronic health effects as specified in technical direction provided by the EPA WAM. The contractor shall conduct perchlorate occurrence analyses to support these risk assessments as described in written technical direction from the EPA WAM. Multiple analyses may be required to address the acute/sub-chronic and chronic assessments. The analyses will use the UCMR 1 data (consistent with analyses conducted in the preceding perchlorate occurrence work assignments), but additional supplemental data may be used upon written technical direction from EPA. The occurrence analyses may also need to be tailored to help EPA assess potential health risks to population subcategories, such as pregnant women and children. The contractor should anticipate providing specific UCMR 1-based occurrence analyses to support EPA

risk assessments. The specific analyses will be defined by EPA through written technical direction. The contractor should be familiar with the risk assessment analyses and documents developed by the Agency to date. The contractor will also provide, upon receipt of technical direction from EPA, editorial, review, and comment incorporation support for risk documents. This may involve general research (e.g., on risk assessment approaches) or specific research (e.g., related to perchlorate health effects and drinking water exposure) in support of the document editorial support. All research and any suggested additions or revisions to risk documents will be thoroughly documented and will include data/information sources, description of analytical approaches, necessary assumptions, etc.

For the planning purposes, the contractor should assume no more than 6 Risk Assessment Analysis will be required. All final documents intended for either web posting or inclusion in the federal docket must also be 508 compliant.

G. SCHEDULE OF DELIVERABLES:

Task	Deliverable	Due Date
Task #0	Workplan	15 days after issuance of Work Assignment
Task #0	Monthly Progress Report	Monthly
Task #0	Monthly Financial Report	Monthly
Task #1	Meeting Agendas/Background Materials	Within 7 days of TD, unless otherwise directed.
Task #1	Detailed Meeting Notes	Within 7 days of meeting, unless otherwise directed.
Task #2	Technical Analysis Documents	Within 14 days of TD, unless otherwise directed.
Task #3	Economic Support Documents/Analysis	Within 14 days of TD, unless otherwise directed.
Task #4	Revised Occurrence Model	Within 14 days of TD, unless otherwise directed.
Task #4	Revise Safewater Distribution Parameters	Within 14 days of EPA WAM approving Revised Occurrence Model, unless otherwise directed.
Task #4	Revised Model Documentation	Within 20 days of EPA WAM approving Revised Occurrence Model, unless otherwise directed.
Task #5	Risk Assessment Analysis	Within 14 days of TD, unless otherwise directed.
Task #5	Risk Assessment Analysis Documentation	Within 14 days of EPA WAM approving the Risk Assessment Models, unless otherwise directed.

H. LEVEL OF EFFORT ESTIMATES:

2910 Hours

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$23,000 or more in cost during

performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

For budgeting purposes, EPA anticipates requiring premeeting support and facilitation at four two-day meetings at EPA offices in Washington, D.C., with travel from the Boston area by one senior Cadmus staff member and with local travel (within the Washington D.C. area) for the second Cadmus staff member.

K. SPECIAL REPORTING REQUIREMENTS:

No special reporting is anticipated for this option period

L. QUALITY ASSURANCE SURVEILLANCE PLAN: Per Contract requirements (*The specific language does not need to be included in the work assignment*)

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-11				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Regulatory Determination 3				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW Section 1.2					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						3,375				
Total:						3,375				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Ali Arvanaghi <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number 202-564-1260 FAX Number:				
Project Officer Name Ronald Coleman <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8491 FAX Number:				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Robert A. Knecht <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2043 FAX Number:				

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-11**

A. TITLE: Support for Regulatory Determination 3

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

Ali Arvanaghi
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ALTERNATE WORK ASSIGNMENT MANAGER:

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D. BACKGROUND:

The Safe Drinking Water Act (SDWA), as amended in 1996, directed the Environmental Protection Agency (EPA) to publish a list of contaminants (referred to as the Contaminant Candidate List, or CCL) to assist in priority-setting efforts. The SDWA also directs EPA to select five or more contaminants from the CCL and determine whether or not to regulate these contaminants with a National Primary Drinking Water Regulation (NPDWR).

This work assignment continues the work of the previous mission contract EP-C-07-022 while also adding tasks that will support EPA's regulatory determination recommendations for internal agency review and eventually publication. In order to support EPA, the contractor's efforts will involve the following, as needed:

- Conducting literature searches to identify additional information on occurrence data/exposure, release and physical properties.
- Preparing materials (i.e., contaminant information sheets, research needs tables) that will be used to assist EPA in option selection, communication with management, stakeholder gatherings, and identifying research needs and attending meetings as requested.
- Collecting documents or other items related to occurrence and exposure that are recommended to EPA in comments on the proposed CCL3.
- Providing workgroup and public meeting support.
- Developing support documents (e.g., Analysis of Occurrence Data and Regulatory Determination Support Document).

Occurrence assessments are a necessary component of the listing and regulatory decision making process. Information on the distribution of contaminant occurrence levels in public water supplies of various source and size categories provides OGWDW with a basis for estimating the number of systems and the size of the affected population experiencing contaminant levels exceeding a known health effect level. Occurrence estimates are used to develop exposure assessments and, subsequently, the contribution of drinking water, relative to other sources of exposure, to total intake. The exposure information will provide the basis for the health assessment. The contractor shall continue the process of collecting and analyzing occurrence data (primary and/or supplemental) on the CCL3 contaminants for the Regulatory Determinations 3 effort as necessary as described by the tasks in this work assignment.

E. QUALITY ASSURANCE:

Tasks 1, 2, 4, 5, and 6 of this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under tasks 1, 2, 4, 5 and 6 of WA 0-11, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of

proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-11. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under tasks 1, 2, 4,5 and 6 of WA 0-11. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP) accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via email.

Deliverables: Work plan, Supplemental Project Specific Quality Assurance Project Plan, monthly progress and financial reports.

Task 1: Finalize Contaminant Background Documents and Update the Regulatory 3 Summary/Analyses and Status Table

The contractor developed background documents and status tables for all CCL 3 contaminants under this task under the previous work assignment. These background documents and status tables provided detailed and summarized overviews, respectively, of available occurrence and health data associated with each contaminant. Under this task, the contractor shall provide updated background documents, summary/analyses, and/or status table for a subset of CCL3 contaminants, as needed as indicated by technical direction from the EPA WAM. For planning purposes, the contractor should assume updates to no more than 7 of the background documents and/or summary/analyses and no more than 3 updates to status table as directed by EPA WAM.

The contractor shall also develop another iteration of background chapters for contaminants for which EPA will not be making a regulatory determination as WAM provides “final” sets of HRLs. The contractor shall update the chapters with the latest contaminant information including information on health effects, occurrence, production, use, release, etc. In addition, these chapters shall include a section in which the decision and rationale to not make a determination is documented (e.g., insufficient data). The contractor shall bind these chapters electronically into a summary document (e.g., pdf) for inclusion in the docket. The electronically-bound document shall include a title page, table of contents, and introductory language. For planning purposes, the contractor shall assume up to two additional iterations of these background chapters and up to two iterations of the bound document.

Deliverables:

- Updated background documents for contaminants for which EPA is not making a regulatory determination.

- Background chapters for those contaminants for which EPA is not making a regulatory determination.

Task 2: Update Technical Analysis of Occurrence Data Sources

The contractor analyzed occurrence data for all CCL 3 contaminants under this task under the previous work assignment. Occurrence analyses are conducted using a two-stage analytical approach. In Stage 1, the data are first reviewed, quality-checked, and characterized. They are then analyzed to generate simple, clear non-parametric estimates of contaminant occurrence. In Stage 2, statistical modeling is used to generate national probability estimates of contaminant occurrence based on estimated annual (or longer-term) mean concentrations of contaminants along with statistical measures of uncertainty and error. This includes disinfection byproducts (e.g. Nitrosamines) which were previously covered by Cadmus on a separate contract.

To the extent that new occurrence data sources become available, the contractor shall continue the analysis of occurrence data sources from the previous work assignment and continue analyses to incorporate new data. The contractor shall consider both the data sources that are currently available as well as any new data sources that may become available during the option year, in discussion with EPA, as described in technical direction from the EPA WAM.

In addition, the contractor shall use publically available data in order to construct national extrapolations for specific chemicals when directed to do so by EPA WAM.

Task 2.1: Under this task, the contractor shall update stage 1 analyses (described above) conducted under previous work assignment as indicated by technical direction from the EPA WAM. For planning purposes, the contractor shall update occurrence/HRL/summary tables ("RegDet3_HRL_analyses...xls") for short list contaminants that have updated/new occurrence data.

Deliverable: Updated Stage 1 Analysis of National Occurrence Report.

Task 2.2: Under this task, the contractor shall update stage 2 analyses (described above) conducted under previous work assignment for specific contaminants as indicated by technical direction from EPA WAM. For planning purposes, the contractor should assume one update.

Deliverable: Updated reports of Stage 2 analysis on selected contaminants.

Task 2.3: Under this task, the contractor shall complete work to help EPA to better understand the Regulatory Determinations 3 occurrence data. For example, a number of the occurrence data sources lack information on sampling methodology, detection limits, reporting limits, dates of sampling, locations of sampling (as well as pertinent site-specific information), and reasons for sampling. A better understanding of these areas will help EPA to conduct meaningful analyses under this work assignment.

As work proceeds on this work assignment and EPA and/or the contractor identify areas which may require follow-up investigation that is necessary to understand the data and conduct meaningful analyses, the WAM will provide the contractor with written technical direction instructing the contractor to investigate. This may include but is not limited to the following: conversations with those who collected the data; conversations with those who published the data; conversations with

those who provided the data to EPA; internet searches; database searches; and literature searches. EPA anticipates follow-up investigations for up to 7 contaminants.

The contractor shall additionally conduct analysis to support EPA's Environmental Justice considerations, as directed by COR, up to and including:

- How did your public participation process provide transparency and meaningful participation for minority, low-income, and indigenous populations and tribes?
- How did you identify and address existing and new disproportionate environmental and public health impacts on minority, low-income, and indigenous populations?
- How did actions taken under #1 and #2 impact the outcome or final decision?

The above defined questions are broad areas defined by the Environmental Justice Office. Initial analysis by the contractor shall focus on question 2 primarily. This effort is a possible continuation of previous efforts under Cadmus contract EP-C-07-022 WA 4-18 and will be requested in technical direction if necessary.

Any collection of information shall be in compliance with the Paperwork Reduction Act (44 U.S.C. chapter 35; 5 CFR 1320) and approved ICRs in place.

Deliverable:

- Updated HRL analysis spreadsheets;
- Updated Stage 1 Analysis Report
- Updated Final Stage 2 Report

Task 3: Meeting Support

The contractor shall attend and prepare summaries of all Reg. Det. 3 workgroup meetings and/or other meetings related to the work being done under this work assignment. In addition, contractor shall attend occurrence sub-team meetings as directed by WAM. For planning purposes, the contractor shall assume that approximately 12 workgroup meetings and 12 occurrence sub-team meetings will be required.

In addition to preparing meeting summaries, the contractor shall provide pre-meeting support such as preparing and distributing meeting agendas and preparing and distributing meeting materials. The contractor shall also develop presentation slides and/or give presentations at one or more workgroup or public meetings, as described in technical direction from the EPA WAM. In such cases, the contractor shall develop draft, interim, and final versions of presentation slides. The contractor shall review and evaluate all notes and presentations delivered to EPA to ensure accuracy and technical soundness.

The contractor shall provide support by reviewing presentations, tables, hand-outs, memos, etc. developed by EPA to help ensure accuracy of content. Additionally, the contractor shall assist EPA in the development of briefing materials as well as meeting materials for public meetings. For planning purposes, the contractor shall assume assistance in the development of 3 sets of meetings materials (slides, tables, and agendas).

For planning purposes, the contractor shall assume no more than one public meeting and between ten and twenty workgroup meetings and that all meetings will be in the Washington, DC area.

Deliverables:

- Meeting notes;
- Draft, interim, and final versions of presentations;
- Comments on presentations, tables, hand-outs, memos, etc;
- Briefing materials.

For the meetings identified under this task, EPA does not anticipate any individual event incurring \$25,000 in total costs, include that of the government and contractor.

Task 4: Other Technical and Programmatic Support

This task supports the development of the CCL Regulatory Determination 3 Federal Register(s).

Subtask 4.1: Federal Register Package Support

The contractor shall provide support on the development of the Federal Register notice providing EPA's notice of intent for the CCL Regulatory Determination 3. Such support shall exclude inherently governmental functions and shall include: identifying and correcting formatting, typographical, grammatical, and other editing issues; identifying inconsistencies within and across the Federal Register notice and other supporting documents (e.g., communications strategy, technical support documents); ensuring the accuracy of cross-references; and retrieving copies of cited references. The contractor shall assist EPA in assembling all materials cited in the preamble for submission to the OW Docket. The contractor shall develop and maintain a typed list of all references being obtained from the EPA authors of the preamble, as identified by the EPA WAM, and their status. The WAM will identify any additional materials that the contractor is to submit to the Docket.

The contractor shall also provide support for the development of other documents that support the Federal Register package such as the communications strategy, transmittal memoranda, forms, and fact sheets as requested by WAM. Support shall include: developing draft documents based on the contents of the draft Federal Register notice and comments provided by the EPA WAM; identifying formatting, typographical, grammatical, and other editing issues; and identifying inconsistencies, retrieval of online and hard copies of journal articles or other reference materials for citation. It should be noted that the contractor will not be required to support the development of the health technical support document under this work assignment.

For work planning purposes, the contractor shall assume that a maximum of one additional revision of the Federal Register notice will be required in the period of performance. The contractor should also assume that a maximum of one additional iteration of supporting materials for the notice will be required in the period of performance.

Deliverables

- Editorial support of draft and final Federal Register notices.

- Draft and final Federal Register supporting materials.
- Online and hard copy retrievals of journal articles or other references for citation.
- Inventory of the materials to be submitted to the Docket.

Subtask 4.2: Occurrence-Related Support for the Reg. Det. 3 FR Notices

The contractor shall review the occurrence and exposure portions of the preamble or responses to comments for the CCL Regulatory Determination 3 FR Notices. After receipt of WAM's written comments, the contractor shall provide support for the revision of the preamble and/or response to comments and submit it to EPA. If additional occurrence analyses, calculations, and revisions are required based on comments on the Federal Register notice(s), the EPA WAM will notify the contractor in writing. For planning purposes, the contractor should assume no more than 3 iterations.

Deliverables: Draft and final reviews of preamble on occurrence and exposure related materials and, if necessary, any additional occurrence analyses.

Task 5: Support for Development of Regulatory Support Document for the Regulatory Determinations for the Third Drinking Water Contaminant Candidate List

The contractor shall provide support in the development of draft, interim, and final regulatory support documents to support Reg. Det. 3. The contractor shall compile the technical analyses and writing conducted under this work assignment and previous work assignments in order to develop the regulatory support document.

Scientific journal articles published in foreign languages shall be translated for EPA use as directed by EPA WAM. The data from translated articles provides new information on the contaminants and shall be referenced in the Regulatory Support Documents.

The contractor shall also conduct and describe any other supporting analyses not conducted elsewhere that may be required to develop the occurrence document(s) and associated text, exhibits, and appendices. For planning purposes the contractor shall assume ten or fewer additional analyses.

The contractor shall support EPA's development of a regulatory support document in stages beginning with draft outline(s), draft chapters, and complete first draft(s), as described in technical direction from the EPA WAM. For planning purposes, the contractor shall assume EPA will require 1-3 drafts of the outline and 1-3 drafts of each chapter, and/or first draft(s) of the complete document.

The contractor shall develop chapters for inclusion in the Regulatory Support Document for Regulatory Determinations for the Third Drinking Water Contaminant Candidate List for each of the individual nitrosamines for which EPA is making a regulatory determination. Under Cadmus Contract EP-C-08-015 the contractor supported EPA's development develop a separate, stand-alone document for the nitrosamines. Contaminants are: NDMA, NDEA, NDPA, NPYR, NMEA, and NDPA.

The contractor shall draw from the work already completed on the stand-alone nitrosamines document to the extent possible to avoid any duplication of work. The chapters on nitrosamines in

the Regulatory Support Document for the Regulatory Determinations for the Third Drinking Water Contaminant Candidate List shall parallel those of the other contaminants.

Subtask 5.1: Federal Register Package Support in response to Expert Review and/or OMB comments

The contractor shall provide support for the revision of regulatory support documents (For the Federal Register) in response to comments made during the review by technical experts and OMB.

Deliverables:

- Draft outline(s), chapters, and first draft of regulatory support document.
- Draft, interim, and final chapters on individual nitrosamines.

Task 6: Preliminary Nitrosamine Analysis of Regulatory Approaches and Options

The contractor shall prepare preliminary analysis to be used in the nitrosamine cost benefit chapters of a potential future economic analysis. An outline of the intended analysis and listing of the high level assumptions shall be prepared by the contractor and delivered to EPA for review and feedback prior to commencing work as specified by WAM technical direction. The major sections and a short description shall adhere to the following organizational structure unless otherwise directed by WAM technical direction:

6.1 Baseline Analysis

The contractor shall develop a collection of analysis and summary tables that presents the data and assumptions used in establishing baselines for the comparison of approaches and options for regulating Nitrosamines. This collection of analysis shall include a discussion on the industry profile, including the numbers and sizes of public water systems and the numbers of wells and entry points per system, the distribution patterns of Nitrosamines, and the water treatment technologies currently in place. This will be a preliminary effort aimed at initial estimates and figures to be potentially used as part of an analysis of regulatory approaches and options in the future for the nitrosamines.

Deliverable: Draft analyses and figures for the baseline analysis.

6.2 Benefits Analysis

The contractor shall develop a set of benefits analysis. Initial analyses shall incorporate the following topics as directed by WAM:

- Nature of regulatory benefits
- Health effects associated with Nitrosamines in drinking water
- Overall risk assessment results including a brief discussion of the risk reduction modeling methods
- Risks to sensitive subpopulations
- Risks to populations served by non-transient non-community water systems
- Quantifiable and nonquantifiable benefits of reducing Nitrosamines in drinking water
- Monetization of benefits including valuation methodologies used
- Uncertainties surrounding benefits estimates

Deliverable: Draft Benefits Analysis

6.3 Economic Impact and Cost Analysis

The contractor shall develop a set of figures which provides a detailed description of the costs involved in implementing the rule, including the burden on water systems and states for implementing the rule.

Deliverable: Draft economic impact and cost analysis information

6.4 Comparison of Benefits and Costs

The contractor shall develop figures which describes the total national benefit and cost estimates for regulatory alternatives as specified by WAM, including a comparison of total benefit and cost estimates.

Deliverable: Draft Comparison of Benefits and Costs

Task 7: Office of Water Webpage Support

The contractor shall provide support for the publication of Reg Det documents on the EPA Office of Water website. As identified by EPA, the contractor shall provide a Section 508 compliant version of documents published to the EPA website. . The documents to be published will be provided by EPA WAM. For planning purposes, the contractor can expect between 10-20 documents to be formatted for web publication. The specific documents will be provided by EPA WAM and will be in their final revision.

G. SCHEDULE OF DELIVERABLES:

Task	Tasks / Task Description	Deadlines	No of Copies/Medium
Task 0: Work Plan Preparation and Project Administration			
	Work Plan	Per contract	electronic
	Monthly Progress report	Per contract	electronic
Task 1: Finalize Contaminant Background Documents and Update the Regulatory 3 Summary/Analyses and Status Table			
	Updated background documents	As specified in technical direction from EPA WAM	electronic
	Background chapters for those contaminants for which EPA is not making a regulatory determination	As specified in technical direction from EPA WAM	electronic
Task 2: Technical Analysis of Occurrence Data Sources			
2.1	Updated Stage 1 Analysis of National Occurrence Report.	2 weeks after receipt of technical direction from EPA WAM.	electronic

2.2	Updated Final reports of Stage 2 analysis on selected contaminants	Within 3 weeks of technical direction from EPA WAM.	electronic
2.3	Updated "RegDet3_HRL_analyses...xls" spreadsheets	As specified in technical direction from EPA WAM	electronic
Task 3: Work Group Meeting Support and Facilitation			
	Meeting Notes	Within one week of each meeting.	electronic
	Draft, interim, and final versions of presentations.	Within 2 weeks after receipt of technical direction from EPA WAM.	electronic
	Comments on presentations, tables, hand-outs, memos, etc.	As specified in technical direction from EPA WAM	electronic
	Briefing materials	As specified in technical direction from EPA WAM	electronic
Task 4: Other Technical and Programmatic Support			
4.1	Draft Federal Register notice support	To be determined upon technical direction from the EPA WAM	electronic
4.1	Final Federal Register notice support	2 weeks after receipt of WAM's written comments on the draft	electronic
4.1	Draft Federal Register supporting materials.	To be determined upon technical direction from the EPA WAM	electronic
4.1	Final Federal Register supporting materials	2 weeks after receipt of WAM's written comments on the draft	electronic
4.1	Online and hard copy retrievals of cited references, maintaining an inventory of the materials to be submitted to the Docket.	To be determined upon technical direction from the EPA WAM	electronic

4.2	Draft reviews of preamble on occurrence and exposure related materials	To be determined upon technical direction from the EPA WAM	electronic
4.2	Final reviews of preamble on occurrence and exposure related materials	To be determined upon technical direction from the EPA WAM	electronic
Task 5: Support for Development of Regulatory Support Document for Reg. Det. 3			
	Draft outline	To be determined upon technical direction from the EPA WAM	electronic
	Draft chapters	2 weeks after receipt of WAM's written comments on the draft	electronic
	First draft of Regulatory Support Document	2 weeks after receipt of WAM's written comments on the draft	electronic
	Draft, interim, and final chapters on individual nitrosamines	As specified in technical direction from EPA WAM	electronic
Task 6: Preliminary Nitrosamine Analysis of Regulatory Approaches and Options			
6.1	Draft analyses and figures for the baseline analysis.	As specified in technical direction from EPA WAM	electronic
6.2	Draft Benefits Analysis	As specified in technical direction from EPA WAM	electronic
6.3	Draft economic impact and cost analysis information	As specified in technical direction from EPA WAM	electronic
			electronic
6.4	Draft Comparison of Benefits and Costs	As specified in technical direction from EPA WAM	electronic

Task 7: Office of Water Webpage Support			
7	Web content and related electronic files (508 Compliance will be specified in technical direction)	As specified in technical direction from EPA WAM	electronic

H. LEVEL OF EFFORT ESTIMATES:

EPA allocates 3,375 professional hours in support of the work outlined in this Work Assignment.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and WAM of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

No Travel is anticipated.

K. SPECIAL REPORTING REQUIREMENTS:

The contractor shall provide status updates for each task on a weekly or bi-weekly basis, either through a meeting with the WAM or over the telephone or email. Also, the contractor shall provide budget updates monthly by phone or email.

L. QUALITY ASSURANCE SURVEILLANCE PLAN: Per Contract requirements

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-12				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name LT2 6-Year Review				
Contractor CADMUS GROUP, INC., THE						Specify Section and paragraph of Contract SOW Section 1.2, 1.4, 1.4, 1.8, 1.9 and 1.10				
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:			LOE: 0					
11/01/2012 To 04/30/2014										
This Action:					1,886					
Total:					1,886					
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Heather Galada <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number 202-564-5248 FAX Number:			
Project Officer Name Ronald Coleman <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-8491 FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Noelle Mills <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2171 FAX Number:			

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-12**

A. TITLE: General Support for the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) Six-Year Review

B. PERIOD OF PERFORMANCE: Effective Date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

Heather Galada
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ALTERNATE WORK ASSIGNMENT MANAGER:

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D. BACKGROUND:

The 1996 Amendments to the Safe Drinking Water Act (SDWA) require EPA to review its existing drinking water regulations every six years. SDWA (Section 1412(b)(9)) specifies that any revision to a national primary drinking water regulation "shall maintain, or provide for greater, protection of the health of persons." In response to E.O. 13563, EPA announced in the August 2011 document, *Improving Our Regulations: Final Plan for Periodic Retrospective Reviews of Existing Regulations*, that the agency would review the LT2 rule. Since the 1996 Amendments, EPA has completed two Six-Year Reviews of National Primary Drinking Water Regulations (NPDWRs) (in 2003 and 2010). Under this work assignment (4-76, EP-C- 08-015), EPA is seeking general support to its current effort pertaining to the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) Six-Year Review, one of the rules that EPA expects to review during the third Six-Year Review (SYR3).

The LT2 rule was promulgated in 2006 to reduce illness linked with the contaminant *Cryptosporidium* and other pathogenic microorganisms in drinking water. The rule requires systems to monitor their source water to determine treatment requirements. This monitoring includes an initial two years of monthly sampling for *Cryptosporidium* (Round 1 monitoring). To reduce monitoring costs, small filtered water systems will first monitor for *E. coli*, which is less expensive to analyze than *Cryptosporidium*, and will monitor for *Cryptosporidium* only if their *E. coli* results exceed specified concentration levels. The *Cryptosporidium*, *E. coli*, and turbidity data generated during the Round 1 LT2 monitoring program have been uploaded to the LT2 Data Collection System by analytical laboratories and reviewed and approved by PWSs. The LT2 Data Collection System is part of the Data Collection & Tracking System (DCTS) developed by EPA to help manage data submissions and notifications associated with implementation of the LT2 and Stage 2 Disinfection By-product (DBP) rules. More information on the data can be found on <http://water.epa.gov/lawsregs/rulesregs/sdwa/mdbp/tools-dcts.cfm#enter>. Round 2 monitoring is expected to take place; however, that data will not be part of the effort under this work assignment. The Work Assignment will assess the added value of the second round of monitoring.

In addition to monitoring, the LT2 rule specifies the amount of treatment that water systems must provide. Filtered water systems will be classified in one of four treatment categories (bins) based on their monitoring results. Most systems are expected to be classified in the lowest bin and will face no additional requirements. Systems classified in higher bins must provide additional water treatment to further reduce *Cryptosporidium* levels by 90 to 99.7 percent (1.0 to 2.5-log), depending on the bin. Systems will select from different treatment and management options from a “microbial toolbox” to meet their additional treatment requirements. All unfiltered water systems must provide at least 99 or 99.9 percent (2 or 3-log) inactivation of *Cryptosporidium*, depending on the results of their monitoring.

The LT2 addresses risks from uncovered finished water reservoirs, in which treated water can be subject to significant contamination as a result of bird and animal wastes, human activity, algal growth, insects, fish, and airborne deposition. Under the LT2 rule, systems that store treated water in uncovered reservoirs must either cover the reservoir or treat the reservoir discharge to inactivate 4-log virus, 3-log *Giardia lamblia*, and 2-log *Cryptosporidium*. These requirements are necessary to protect against the contamination of water that can occur in open reservoirs. Also, systems must review their current level of microbial treatment before making a significant change in their disinfection practice (i.e., disinfection profiling and benchmarking). This review will assist systems in maintaining protection against microbial pathogens as they take steps to reduce the formation of disinfection byproducts under the Stage 2 Disinfection Byproducts Rule.

As part of the SYR3 process for the LT2 rule, EPA will assess and analyze new data/information regarding occurrence, treatment and other risk mitigation measures, analytical methods, health effects, and risk from all relevant contaminants to evaluate whether there are new or additional ways to estimate and manage risk that will maintain or strengthen public health protection.

The primary tasks to be conducted under this WA include the following:

- **Task 0:** Project Management
- **Task 1:** Technical Support Document
- **Task 2:** Public Health and Outbreak Analysis
- **Task 3:** Provide Administrative, Analytical, Writing Support

E. QUALITY ASSURANCE:

Tasks 1 and 2 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under tasks 1 and 2 of WA 0-12, consistent with the Agency's Quality Assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The Contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the Contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the Contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-12. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under tasks 1 and 2 of WA 0-12. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP] accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via email.

Deliverables:

- Work plan
- Monthly progress and financial reports
- Cost and level of effort estimates, as requested by EPA WAM

Task 1: Technical Support Document

The Contractor shall continue developing the LT2 Six-Year Review and Retrospective Review technical support document that was started under WA 0-12. The technical support document will be developed for usage by the general public and will describe the analyses conducted for the review of LT2 including, but not limited to: health effects, occurrence and exposure analyses, microbial toolbox tools, implementation issues and analytical methods. A separate chapter will be devoted to each individual topic area. The Contractor will be asked to work on each chapter independently and then finalize the document by ensuring that the chapters fit together. The Contractor shall also develop a Six-Year Review Decision Tree for the document. The Contractor shall use information from reports developed for the other tasks under (DWPD WA 4-76, Contract EP-C- 08-015) and (SMRD WA Contract EP-C-12-023), as well as any additional information specified by the WAM. In developing the technical support document, the Contractor shall submit a draft and final document, and matrix for addressing EPA's comments.

Deliverables:

- Draft Support Document
- Matrix for Addressing EPA Comments
- Final Support Document

Task 2: Public Health and Outbreak Analysis

The Contractor shall collect and analyze data and information that will inform potential public health risks from *Cryptosporidium* and other contaminants of potential concern. This data will include surveillance data from utilities (which will be provided by EPA) and outbreak information that the Contractor shall collect. This outbreak information may be gathered from sources such as Centers for Disease Control 's (CDC) outbreak investigations, Morbidity and Mortality Weekly Reports (MMWRs), state or local surveillance and outbreak reports, and other sources as needed. The surveillance information shall focus on *Cryptosporidium* and other contaminants of concern that may be related to Uncovered Finished Water Reservoirs or inadequately treated surface water or Groundwater Under the Direct Influence (GWUDI).

Deliverables:

- Draft Report Outline
- Final Report Outline
- Draft Report
- Matrix for Addressing EPA Comments
- Final Report

Task 3: Provide Administrative, Analytical, Writing Support

As directed by the WAM, the Contractor shall provide administrative, analytical, and writing support to help EPA fulfill its obligations regarding consultations, outreach, options selection, and other tasks as determined by EPA. The Contractor shall provide general support as identified by EPA including: developing fact sheets, presentation materials and visual aids, communication materials, and interim drafts; providing technical and copy editing services; supporting EPA docket management

activities; and conducting literature searches and telephone inquiries. Technical and copy editing includes reviewing documents for technical accuracy, responding to all comments received from EPA (by incorporating changes into the document, or explaining why no action was taken), and ensuring consistency throughout documents.

EPA projects that approximately 10% of the total LOE will be required to complete this task

Deliverables:

- Consultation and outreach fact sheets, presentation materials and visual aids, communication materials, and support documents and analyses (estimated total of 4-7), as directed by the WAM
- Additional interim drafts of any of the above documents, as directed by the WAM
- Technical and copy editing reviews of documents, as identified by EPA
- Up to two literature search summaries, as identified by EPA

G. SCHEDULE OF DELIVERABLES:

The Contractor shall develop and deliver all documents and/or deliverables related to the LT2 review process (e.g., materials developed by the Contractor, EPA, or non-EPA stakeholders) in Microsoft Office or PDF format and will comply with EPA's 508 compliance and EPA metadata requirements for posting on the Internet.

Task	Deliverable	Due to EPA	No. of Copies/Medium
0	Workplan, schedule, staffing plan and LOE estimates for each task	In accordance with contract requirements	In accordance with contract requirements
0	Monthly progress and financial reports	In accordance with contract requirements	In accordance with contract requirements
0	Weekly or Biweekly telephone or email status reports	Weekly/Biweekly each month; starting on the first week of the WA	1 electronic copy, as applicable
1	Draft Support Document	Within 2 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
1	Matrix for Addressing EPA Comments	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
1	Final Support Document	Within 1 week of EPA providing comments to the Contractor	Electronic copies (MS Word) and Section 508 compliant versions as requested by WAM
2	Draft Report Outline	Within 1 week of TD from the EPA WAM	Electronic copies (MS Word) as requested by WAM
2	Final Report Outline	Within 1 week of EPA providing	Electronic copies (MS

		comments to the Contractor	Word) as requested by WAM
2	Draft Report	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
2	Matrix for Addressing Comments	Within 1 week of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
2	Final Report	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word and pdf) and Section 508 compliant versions as requested by WAM
3	Interim draft versions of support documents and analyses	Within 5 business days of EPA providing comments on the initial draft(s)	Electronic copies as requested by the WAM
3	Technical and copy editing reviews	As directed by the WAM	Electronic copies as requested by the WAM
3	Consultation and outreach fact sheets	Within 10 business days of EPA identifying specific content	Electronic/hard copies and Section 508 compliant versions as requested by the WAM
3	Interim draft versions of consultation and outreach fact sheets	Within 5 business days of EPA providing comments on the initial draft(s)	Electronic copies as requested by the WAM
3	Literature search summaries	Within 5 business days of EPA directing Contractor	Electronic copies as requested by the WAM
3	Presentation materials and visual aids (4-7 total)	Within 10 business days of EPA directing the Contractor to start working on the presentation(s)	Electronic/hard copies and Section 508 compliant versions as requested by the WAM
3	Interim draft versions of presentation materials and visual aids	Within 5 business days of EPA providing directing the Contractor to start working on the presentation(s)	Electronic copies as requested by the WAM
3	Communications materials	Within 10 business days of EPA directing the Contractor to start	Electronic/hard copies and Section 508

		working on the presentation(s)	compliant versions as requested by the WAM
3	Interim draft versions of communications materials	Within 5 business days of EPA providing directing the Contractor to start working on the presentation(s)	Electronic copies as requested by the WAM

H. LEVEL OF EFFORT ESTIMATES:

The estimated Level of Effort for this Work Assignment is 1886 hours.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

Only local travel is expected from the Contractor to support the work outlined in this work assignment.

K. SPECIAL REPORTING REQUIREMENTS:

The Contractor shall provide status updates for each task on a weekly or bi-weekly basis, either through a meeting with the EPA WAM or over the telephone or email.

L. QUALITY ASSURANCE SURVEILLANCE PLAN: Per Contract requirements

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-13				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name CCL4:Microbial Contaminants				
Contractor CADMUS GROUP, INC., THE						Specify Section and paragraph of Contract SOW section 1.2				
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						339				
Total:						339				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Cesar Cordero <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number 202-564-3716 FAX Number:				
Project Officer Name Ronald Coleman <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8491 FAX Number:				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Robert A. Knecht <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2043 FAX Number:				

**Performance Work Statement
EPA CONTRACT EP-C-12-023
Work Assignment 1-13**

A. TITLE: Support for the Contaminant Candidate List 4: Microbial Contaminants

B. Period of performance: Effective date thru April 30, 2014

C. Work Assignment Manager (WAM):

César E. Cordero
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Alternate Work Assignment Manager (WAM):

Hannah Holsinger
USEPA/OW/OGWDW/SRMD
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D. BACKGROUND:

The Safe Drinking Water Act (SDWA) as amended in 1996 requires EPA to publish a list of contaminants that are known or anticipated to occur in public water systems, and which may require regulation under the SDWA known as the Drinking Water Contaminant Candidate List, or CCL. (Section 1412(b)(1)).

EPA published the final third drinking water Contaminant Candidate List (CCL3) in the Federal Register on October 8, 2009. In developing the CCL3, EPA implemented an improved process from that which was used for previous CCLs. The CCL3 process was based on substantial expert input and recommendations from the National Academy of Science's National Research Council (NRC) and National Drinking Water Advisory Council (NDWAC). EPA used a multi-step process to identify contaminants for inclusion on the CCL3. The list of bacteria, viruses, protozoa, helminths, and fungi in Taylor et al. (2001) was adopted upon the recommendation of NDWAC (2004) as the starting point for the CCL3 microbial Universe. The microbial Universe included a

total of 1,425 human pathogens including those compiled by Taylor et al. (2001) as well as nominations from the scientific community and EPA experts (*Contaminant Candidate List 3 Microbes: Identifying the Universe*).

The agency then applied 11 screening criteria to identify a preliminary CCL (PCCL) of 29 pathogens based on their potential to occur in public water systems and the potential for public health concern (See document: *Contaminant Candidate List 3 Microbes: PCCL TO CCL Process*). These microbes were then further evaluated using a classification approach and expert judgment to identify the CCL3. The screening criteria were developed in part following the recommendations of the NRC and NDWAC workgroup on the CCL process and further reviewed by a panel of external experts as well as deliberations of the EPA microbiology workgroup based upon the expert panel report.

This work assignment continues efforts to review and update existing information on drinking water microbial contaminants and provide technical support through the publishing of the fourth draft Contaminant Candidate List (CCL4). This work assignment will build upon data collection efforts and analyses completed for previous CCL efforts under previous work assignments WA's 4-37 and 5-37 issued under Cadmus Contract EP-C-07-022 and WA 0-13 under Cadmus Contract EP-C-12-023. The contractor shall utilize materials and analyses completed for previous CCL efforts and shall update and build upon data collected under previous CCL efforts and the CCL3 screening process for this work assignment. Data, materials, and analyses collected for the regulatory determination process for microbial contaminants on the CCL3 should also be utilized as applicable.

This work assignment is a follow on to efforts completed under previous Cadmus work assignments. The documents and most of the data sources that serve as applicable references are in the possession of the contractor. A list of some of these documents' is provided in the "References" section at the end of this document. This list is not meant to be comprehensive and additional references could be added by either the contractor or the EPA WAM.

Under this work assignment the contractor shall continue identifying new data sources relevant to the CCL 4 microbial contaminants and update the data management plan as needed. The contractor shall provide the draft deliverables for review and comment by the WAM. Upon receipt of comments and technical direction from the EPA WAM, the contractor shall revise the draft deliverables into finalized product(s) to support and document the CCL4 development process. [Add language on public comment and response prep work and support document]

E. QUALITY ASSURANCE:

Task(s) 2, 3, 4, and 5 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under task(s) 0 of WA 0-13, consistent with the Agency's Quality Assurance (QA) requirements, appending

the Contract Level Quality Assurance Project Plan (QAPP). The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. STATEMENT OF WORK:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-13. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under task(s) 0 of WA 0-13. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs` broken out by the tasks in this WA. The contractor shall immediately notify the Project officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur and prepare a new SQAPP supplementing the Contract Level (QAPP) accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the PO via e-mail.

Deliverables:

Work plan

Monthly progress and financial reports

Task 1.0: General Meeting(s)/Conference Calls

The contractor shall plan to participate on 1 – 2 conference calls per month with the CCL4 microbes sub team. The calls are expected to be one hour in duration. The contractor shall provide for the taking of conference call notes and shall provide a copy to the WAM within 2 working days of the conclusion of the meeting/call.

Deliverables:

Meeting Notes

Task 2.0: Data Collection and Evaluation

Under previous WA's 4-37, 5-37 and 0-13 of contracts EP-C-07-022 and EP-C-12-023 respectively, the contractor collected data which had been published after CCL3 was finalized to

be used in updating the information for CCL4 microbial contaminants. Based on the EPA WAM's written direction, the contractor shall collect and compile any additional updated data for CCL3 microbial contaminants, microbial contaminants with previous negative regulatory determinations, CCL4 nominated contaminants, and other individual microbial contaminants.

The contractor shall continue reviewing relevant published peer reviewed literature, throughout the duration of this work assignment. The contractor shall focus the review on new information related to occurrence in drinking water, waterborne disease outbreaks, and health effects, related to any of the final CCL3 pathogens, nominated pathogens as well as emerging drinking water pathogens. Information sources could include those already known by the contractor or recommended by the EPA WAM. After review of the new information and approval by the EPA WAM the contractor shall update any relevant documentation developed under this work assignment or previous work assignments (WA4-37,WA 5-37 or WA 0-13).

The contractor shall also continue work initiated under WA 5-37 of Cadmus' EPA contract EP-07-022 to update the fact sheets developed for all final CCL3 pathogens and other selected pathogens received through public nominations as after technical direction is issued by the EPA WAM. The contractor shall finalize the fact sheets after approval and technical direction from the EPA WAM.

Upon completion of data collection efforts, the contractor shall provide a spread sheet that includes a summary of the compiled data as requested by the EPA WAM. The spread sheet shall also include a summary of the updated data sources that had been identified and which were used to update CCL4 relevant documents.

Deliverables:

Updated and Final Relevant CCL4 Microbes Documentation (e.g. Fact Sheets, Support Documents, etc.)

Draft(s) and Final Summary Spread Sheet(s) of Compiled Data and Data Sources.

Task 3.0: Nominations Data Analysis, Evaluation, and Nominations Summary Document

The contractor shall develop a spread sheet/table summarizing the data provided by the nominees in support of each of the microbial nominations.

After technical direction from the EPA WAM, the contractor shall evaluate any new microbial data relevant to any of the CCL4 nominated contaminants and re-screen the contaminant(s) using this new data (data collected or identified since the CCL3) through the CCL4 process (as described in the Final CCL3 Microbes support documents). The contractor shall provide updated summaries (tables/ spread sheets) of the status of the nominated contaminants in the CCL4 process (i.e., was the nominated contaminant added to the CCL4 Universe, PCCL, or CCL4) as requested by the EPA WAM. For all nominated microbial contaminants not currently on the final CCL3 the contractor shall revise the scoring sheet(s) (i.e. such as the ones found in the

Final CCL3 Microbes: PCCL to CCL support document) after technical direction from the EPA WAM. In doing this, the contractor shall utilize any products developed under WA 4-37,5-37 and/or 0- if appropriate.

The contractor shall update any relevant documents developed under this work assignment, WA 4-37,WA 5-37 or WA 0-13 to include data used in the evaluation, application of screening criteria or scoring protocols, and listing decisions for nominated contaminants accordingly.

The contractor shall develop a draft summary document presenting the evaluation of nominated microbial contaminants for the CCL4 (not to exceed 5 pages) and shall finalize after review and technical direction by the EPA WAM. The contractor shall also prepare tables or appendices for the microbial nominations summary document after technical direction by the EPA WAM (potentially to include nominated microbial contaminants that were added to each step of the CCL4 process, such as Universe, PCCL, or CCL4, if any). After review and approval of the draft document by the EPA WAM the contractor shall finalize the document.

The contractor shall develop a draft spread sheet/table that summarizes all relevant NRC and NDWAC recommendations related to microbial contaminants for the final CCL3 and identify any areas of potential conflict with the information provided through the CCL4 microbial nominations process. The contractor shall finalize the spread sheet/table after approval and technical direction from the EPA WAM.

All applicable deliverables developed shall meet OGWDW and EPA data warehouse standard operating procedures for printed or web related materials.

Deliverables:

Updated and Final Spread sheet/table Summarizing Microbial Contaminants Nominations Data/Information

Updated and Final Status of Nominated Microbial Contaminants in CCL4 process

Draft(s) and Final CCL4 Microbes Nominations Summary Document

Draft(s) and Final Spread Sheet/Table Summarizing CCL3 NRC/NDWAC Recommendations

Task 4.0: Technical Analyses, Data Evaluation and Identification of Contaminants for the Draft CCL 4

Based on technical direction from the EPA WAM, the contractor shall conduct technical analyses related to the CCL and provide technical and analytical writing related to the analyses. Technical analyses will include evaluation of microbial contaminants for inclusion on the Draft CCL4 utilizing the data collected and the CCL3 screening and scoring processes and criteria for evaluating a contaminant. In addition, analyses shall incorporate any relevant information developed under Task 3. The contractor shall also assist with analyses of new data for microbial contaminants with previous regulatory determinations (Regulatory Determinations 1 & 2) as needed and directed by the EPA WAM. The contractor shall provide updated draft(s) lists of

microbial contaminants that, based upon the CCL3 criteria and process, may be included on the draft CCL4, if any.

The contractor shall provide a spread sheet and written summary of any changes between the Draft CCL4 and the Final CCL3 and document the data and reason(s) for such changes as needed based on technical direction from the EPA WAM. Based on the EPA WAM's technical direction, the contractor shall also provide summary statistics about the microbial contaminants in the Universe, PCCL, and Draft CCL4, such as information on the number of contaminants in various groups including bacteria, virus, protozoa, helminths, fungi, emerging contaminants, and any other groups as necessary.

If determined feasible, the contractor in consultation with the EPA WAM, shall develop data summaries (contaminant information sheets similar to the one page documents developed for the chemical contaminants) showing how the contaminant was evaluated in the process including, the microbe considered, data used in the evaluation, application of screening criteria or scoring protocols, updated information on health effects/assessments, occurrence, waterborne disease outbreaks as reported by CDC in their Mortality and Morbidity and Weekly Reports (MMWRs), and listing decisions accordingly.

Deliverables:

Updated lists of the CCL4 Microbes

Updated and Final Data Summaries (Contaminant Information Sheets)

Draft(s) and Final Spread Sheet and Written Summary of Changes between CCL3 and the Draft CCL4

Updated and Final summary statistics of CCL4 contaminants

Task 5.0 Support Document(s) for the Draft CCL4 Microbes

Based on technical direction from the EPA WAM, the contractor shall develop a draft outline for the CCL4 Microbes support document that discusses the following topics: 1) summary of the evaluation process of microbial contaminants for the CCL4 ; 2) summary of the data submitted through the nomination process; 3) summary of the data collected on nominated microbial pathogens (not provided through the nomination process); 4) data collected on the 12 microbial pathogens included in the final CCL3 and associated support documents (e.g. updated fact sheets); 5) summary of nominated microbial contaminants scoring from Tasks 3 and 4 as appropriate and; 6) summary of the updated data compared to the data available under CCL3. Additional topics may be included in the outline and in the resulting report based on discussions between the contractor and the EPA WAM and final approval by the EPA WAM. The contractor shall finalize the outline after approval and technical direction from the EPA WAM.

After approval of the final outline and technical direction from the EPA WAM the contractor shall prepare a draft CCL4 Microbes support document that will describe the data collection

effort and assess the extent of the changes since publication of the final CCL3, including a summary of the updated data sources. In doing this the contractor shall use deliverables produced under previous tasks and/or work assignments (WA 4-37, 5-37 and/or 0-13). The contractor shall finalize the summary report after approval and technical direction from the EPA WAM.

The contractor shall refer to the CCL3 support document “*Contaminant Candidate List 3 Microbes: PCCL TO CCL Process*” and use as a reference in developing the outline and the CCL4 Microbes support document.

The final version of the support document shall adhere to the requirements under Section 508 as described at: <http://www.epa.gov/accessibility/>

The contractor shall also provide support for developing briefing materials and other issue papers related to the CCL microbial contaminants, based upon written technical direction from the EPA WAM.

Deliverables:

Draft(s) and Final CCL4 Microbes Support Document Outline

Draft(s) and Final CCL4 Microbes Support Document (508 compliant)

Task 6.0: Support for the CCL 4 Microbes Comment Response Process

Identify and Summarize comments

EPA plans to publish a Federal Register Notice presenting the Draft CCL 4 list for public comment. The public comment period may extend past the period of performance of this work assignment, so this task will cover any comments received during the period of performance. After technical direction from the EPA WAM, the contractor shall assist EPA with the comment response process. The contractor shall review all microbial contaminant related comment letters, e-mail and attachments as they are received by the OW Docket Center to identify and summarize the comments and main issues. The comment summary should include a classification of each comment letter by commenter category (e.g., environmental group, state or local government, etc.), the number of comments on each contaminant (or group of contaminant), and identify major issues/themes.

Update the Web-based Comment-Response Database and Develop a List of Comment Codes

Under previous contracts and WA’s (for CCL 3 WA 1-23) (and in support of the perchlorate final regulatory determination), the contractor developed a web-based comment response database. The contractor shall update and maintain this database for the purpose of containing and tracking all correspondence received from the public on the draft CCL 4 Federal Register Notice. All official comments shall be maintained as verbatim reproductions of the comments received from the public.

The contractor shall develop a draft outline of comment codes for the purpose of categorizing

public comments into the comment response database (to include at least one comment code for each contaminant included on the draft CCL 4). The EPA WAM will review this draft outline and provide comments to the contractor. After receiving comments from the EPA WAM the contractor shall revise the outline and submit the final outline to the WAM.

Develop tracking codes and enter comments into database

After EPA WAM approval of the final outline, the contractor shall review, as they are received, all public comment letters, e-mail, and attachments received by the OW Docket Center and provide each comment with tracking codes. These codes will identify the comment letter (as numbered by the OW docket), comment number of the individual comment within each letter, and the comment code (from the outline) that each individual comment falls under (comments should only be categorized into one comment code). The EPA WAM will review the marked up sections of each comment letter to examine the coding assigned to each comment and ensure accurate categorization of comments. After receiving comments from the EPA WAM, the contractor shall reassign any comments that may have been mis-categorized and enter each comment into the approved database.

The contractor shall ensure that all comments have been coded by subject area. The contractor shall ensure that each unique comment has been entered into the database. The entry shall contain all of the information coded above and the verbatim text of the comment. The contractor shall submit a written summary of significant issue to the EPA WAM.

Maintain the comment response database

The contractor shall maintain and update the database and its supporting documentation. The contractor shall minimize the down-time of the web link and notify the EPA WAM when the down-time does occur. The contractor shall locate comments by their subject code, track the number of comments under each subject code and check responses to ensure all comments have been responded to. After technical direction from the EPA WAM, the contractor shall query the database and provide the EPA WAM with the approximate number and nature of comments received.

The contractor shall sort comments by subject category code for distribution to EPA staff responsible for responding to comments.

Deliverables:

Draft Summary of Comments

Draft and Final Subject Category (Comment Code) Outline

Draft and Draft Final assignment of tracking codes for each public comment letter

Draft Comment Response Database

G. OTHER REQUIREMENTS:

The contractor shall develop and maintain information management systems compatible with systems currently used by EPA so that data from other studies can also be inputted. Data sets and analysis software and/or documentation produced under this WA shall be provided to the EPA WAM upon completion of the WA.

Written deliverables must adhere to EPA's plain language, 508 compliance policy and metadata requirements. These requirements are available at: www.plainlanguage.gov, <http://www.epa.gov/accessibility/>, and http://yosemite.epa.gov/OEI/webguide.nsf/content/pdf_metadata respectively.

H. SPECIAL REPORTING REQUIREMENTS: None.

I. GOVERNMENT RESPONSIBILITIES: As outlined in the Contract and this Work Assignment.

J. RESOURCES ESTIMATES: EPA estimates 339 LOE hours.

K. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

L. SCHEDULE AND DELIVERABLES:

The Contractor shall submit all deliverables in the following forms: three hard copies, one electronic copy. Deliverables shall meet Agency communication product standards as defined at <http://www.epa.gov/productreview/stylebook/index.html>.

Task	Description	Estimated Date Of Completion
0	Work plan, Technical Progress Reports	Per contract
1.0	Meeting/Conference Calls Notes	Within 2 work days after the conclusion of the meeting

Task	Description	Estimated Date Of Completion
2.0	Updated Relevant CCL4 Microbes Documentation (e.g. Fact Sheets, Support Documents, etc)	TBD in written technical direction from the EPA WAM
	Final Relevant CCL4 Microbes Documentation	10 days after receipt of written comments from the EPA WAM
	Draft(s) Summary Spread Sheets of Compiled Data and Data Sources	TBD in written technical direction from the EPA WAM
	Final Summary Spread Sheets of Compiled Data and Data Sources	One week after receipt of written comments from the EPA WAM
3.0	Updated Spread sheet/table Summarizing Microbial Contaminants Nominations Data/Information	TBD in written technical direction from the EPA WAM
	Final Spread sheet/table Summarizing Microbial Contaminants Nominations Data/Information	One week after receipt of written comments from the EPA WAM
	Updated Status of Nominated Microbial Contaminants in CCL4 process	TBD in written technical direction from the EPA WAM
	Final Status of Nominated Microbial Contaminants in CCL4 process	One week after receipt of written comments from the EPA WAM
	Draft(s) CCL4 Microbes Nominations Summary Document	TBD in written technical direction from the EPA WAM
	Final CCL4 Microbes Nominations Summary Document	10 days after receipt of written comments from the EPA WAM
	Draft(s) Spread Sheet/Table Summarizing CCL3 NRC/NDWAC Recommendations	TBD in written technical direction from the EPA WAM
	Final Spread Sheet/Table Summarizing CCL3 NRC/NDWAC Recommendations	One week after receipt of written comments from the EPA WAM

Task	Description	Estimated Date Of Completion
4.0	Updated lists of the CCL4 Microbes	TBD in written technical direction from the EPA WAM
	Updated Data Summaries (Contaminant Information Sheets)	TBD in written technical direction from the EPA WAM
	Final Data Summaries (Contaminant Information Sheets)	10 days after receipt of written comments from the EPA WAM
	Updated Spread Sheet and Draft(s) Written Summary of Changes between CCL3 and the Draft CCL4	TBD in written technical direction from the EPA WAM
	Final Spread Sheet and Written Summary of Changes between CCL3 and the Draft CCL4	One week after receipt of written comments from the EPA WAM
	Updated Summary Statistics of CCL4 Microbial Contaminants	TBD in written technical direction from the EPA WAM
	Final Summary Statistics of CCL4 Microbial Contaminants	One week after receipt of written comments from the EPA WAM
5.0	Draft(s) CCL4 Microbes Support Document Outline	TBD in written technical direction from the EPA WAM
	Final CCL4 Microbes Support Document Outline	One week after receipt of written comments from the EPA WAM
	Draft(s) CCL4 Microbes Support Document	TBD in written technical direction from the EPA WAM
	Final CCL4 Microbes Support Document (508 compliant)	Two weeks after receipt of written comments from the EPA WAM

Task	Description	Estimated Date Of Completion
6.0	Draft Summary of Comments	TBD in written technical direction from the EPA WAM
	Draft Subject Category (Comment Code) Outline	TBD in written technical direction from the EPA WAM
	Final Subject Category (Comment Code) Outline	One week after receipt of written comments from the EPA WAM
	Draft assignment of tracking codes for each letter	TBD in written technical direction from the EPA WAM
	Draft Final assignment of tracking codes for each letter	10 days after receipt of written comments from the EPA WAM
	Draft Comment Response Database	TBD in written technical direction from the EPA WAM

M. QUALITY ASSURANCE SURVEILLANCE PLAN: Per contract requirements.

List of References

- Contaminant Candidate List 3 Microbes: Identifying the Universe (EPA 815-R- R-09-004)
- Contaminant Candidate List 3 Microbes: Screening to the PCCL (EPA 815-R-09-005)
- Contaminant Candidate List 3 Microbes: PCCL TO CCL Process (EPA 815-R-09-009)
- Drinking Water Contaminant Candidate List 3 – Draft Notice
- Drinking Water Contaminant Candidate List 3 – Final Rule
- Microbial Expert Input and Review for the Third Contaminant Candidate List (EPA 815-R-08-0010)
- Summary of Nominations for the Third Contaminant Candidate List (August, 2009)
- Guidelines for Canadian Drinking Water Quality (CADW): Summary of Guidelines – Health Canada
- Health Canada. 2006. Guidelines for Canadian Drinking Water Quality (CADW): Guideline Technical Document - Bacterial Waterborne Pathogens: Current and Emerging Organisms of Concern.
- WHO Guidelines for Drinking Water Quality (4th Edition, 2011)
- Taylor, H.L., S.M. Latham, and M.E.J. Woolhouse. 2001. Risk factors for human disease emergence. *Phil. Trans. R. Soc. Lond. B.* (356): 983 – 989.
- Appendix to *Phil. Trans. R. Soc. Lond. B.* (ISSN 0962 8436) No. 1411, pp. 983 – 989, July 29, 2001.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-14				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Lab Cert. Training				
Contractor CADMUS GROUP, INC., THE						Specify Section and paragraph of Contract SOW Section 1.1 and 4.3				
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/01/2013 To 04/30/2014				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 0				
11/01/2012 To 04/30/2014										
This Action:						400				
Total:						400				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:		LOE:				
Cumulative Approved:				Cost/Fee:		LOE:				
Work Assignment Manager Name Judy Brisbin <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number 513-569-7883 FAX Number:				
Project Officer Name Ronald Coleman <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8491 FAX Number:				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Noelle Mills <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2171 FAX Number:				

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-14**

A. TITLE: Laboratory Certification Chemistry/Microbiology Training Support & Oversight

B. PERIOD OF PERFORMANCE: Effective date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

Judy Brisbin
U.S. Environmental Protection Agency
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Standards and Risk Management Division/Technical Support Center
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ALTERNATE WORK ASSIGNMENT MANAGER:

Glynda Smith
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Email: smith.glynda@epa.gov
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D. BACKGROUND:

Public water systems serving at least 25 persons or having at least 15 service connections must comply with the Safe Drinking Water Act (SDWA) and the requirements of the National Primary Drinking Water Regulations (NPDWR) (40 CFR 141). Section 1401(1)(D) of the Act defines a National Primary Drinking Water Regulation to include "criteria and procedures . . . [for] quality control and testing procedures to insure compliance . . . " EPA regulations require community water systems to conduct monitoring for compliance with the drinking water standards. In addition, regulations provide that analyses must be conducted by laboratories certified by EPA or the States. The regulations also establish requirements for laboratory certification.

The Office of Ground Water and Drinking Water (OGWDW) Technical Support Center (TSC), with assistance from the Office of Research and Development (ORD), has the responsibility for developing and implementing the national certification program for laboratories that analyze drinking water samples and for implementing the Safe Drinking Water Act. These responsibilities include the following:

- Develop and participate in training courses to support the certification program (contract sections 2.1.4 and 4.3).

E. QUALITY ASSURANCE:

The tasks in this work assignment do not require environmental measurements. Consistent with the Agency's quality assurance (QA) requirements, the contractor does not need to supplement the Contract Level Quality Assurance Project Plan (QAPP) or to prepare a Project-Specific Quality Assurance project Plan (SQAPP).

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The Contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the Contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs. In addition, the work plan shall specify that a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract Level QAPP or a PQAPP is not required. This task also includes monthly progress and financial reports. Monthly financial reports must include a table with the invoice LOE and cost amount broken out by the tasks in this WA.

Deliverables: Work plan, monthly progress and financial reports.

Task 1: Preparation of Certification Officer Training Course Materials

Task 1.1 Initial Mock Laboratory Data Package

The contractor shall support EPA by preparing mock laboratory data packages for EPA Test Method 300.0 Revision 2.1 Part A for use during the EPA Certification Officer Training Course. The data package will include the 8 currently regulated drinking water analytes listed in Part A of the method and the following sections: Standard Operating Procedure (SOP), Initial Demonstration of Capability (IDC), Method Detection Limit (MDL), and Field/Performance Testing (PT) samples. The SOP shall be prepared in Microsoft Office Word 2007. The rest of the data package, the data portion, shall be prepared in Microsoft Office Excel 2007.

Deliverables: Initial Mock Laboratory Data Package that is Section 508 compliant.

Task 1.2 Additional Mock Laboratory Data Packages/Data Package Sections

Upon approval of the Initial Mock Laboratory Data Package, the contractor shall prepare additional complete Data Packages, in order, for EPA Test Methods 200.9 revision 2.2 (~14 analytes), 515.4 revision 1.0 (~6 analytes), 200.8 revision 5.4 (~16 analytes) and 525.3 revision 1.0 (~17 analytes).

Deliverables: Additional Mock Laboratory Data Packages that are Section 508 compliant.

G. SCHEDULE OF DELIVERABLES:

Task	Deliverable	Due EPA	# Copies/Medium
0	Work Plan	Per contract	One copy via email
0	Monthly progress and financial reports	Per contract	One copy via email
1.1	Initial Mock Laboratory Data Package that is Section 508 compliant	Within 45-days of EPA's technical direction to start	One copy via email; one hard copy
1.2	Additional Mock Laboratory Data Packages that are Section 508 compliant	Within 30-days of EPA's technical direction to start	One copy via email; one hard copy

H. LEVEL OF EFFORT ESTIMATES: 400 Hours.**I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:**

The contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$23,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

The contractor shall assume travel will be required in support of this work effort. For planning purposes, the contract shall assume the need for 1 trip for 2 people from Massachusetts to Cincinnati, OH. The EPA WAM will provide written technical direction. Prior to travel, the contractor shall receive authorization from the Project Officer.

K. SPECIAL REPORTING REQUIREMENTS:

The contractor shall report any urgent issues to the WAM via phone or email.

L. QUALITY ASSURANCE SURVEILLANCE PLAN:

Per Contract requirements.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-16			
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:			
Contract Number EP-C-12-023			Contract Period 11/01/2012 To 04/30/2014 Base Option Period Number 1			Title of Work Assignment/SF Site Name Microbial By-Product Rules			
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW Sections 1.2, 1.3, 1.4, 1.5, 1.7, 1.8, 2.1, 3.1				
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval					Period of Performance From 11/01/2012 To 04/30/2014				
Comments:									
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>									
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.									
SFO <input type="checkbox"/> (Max 2)									
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars) (Cents)	Site/Project (Max 8)	Cost Org/Code
1									
2									
3									
4									
5									
Authorized Work Assignment Ceiling									
Contract Period:		Cost/Fee:		LOE:					
11/01/2012 To 04/30/2014									
This Action:									
Total:									
Work Plan / Cost Estimate Approvals									
Contractor WP Dated:				Cost/Fee		LOE:			
Cumulative Approved:				Cost/Fee		LOE:			
Work Assignment Manager Name Richard Weisman <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code:			
						Phone Number: 202-564-2822			
						FAX Number:			
Project Officer Name Ronald Coleman <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code:			
						Phone Number: 202-564-8491			
						FAX Number:			
Other Agency Official Name Hannah Holsinger <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code:			
						Phone Number: 202-564-0000			
						FAX Number:			
Contracting Official Name Robert A. Knecht <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code:			
						Phone Number: 513-487-2043			
						FAX Number:			

**PERFORMANCE WORK STATEMENT
CADMUS CONTRACT EP-C-12-023
WORK ASSIGNMENT 1-16**

A. TITLE: Review of Microbial/Disinfectant By-Product Rules

B. PERIOD OF PERFORMANCE: Effective Date through April 30, 2014

C. WORK ASSIGNMENT MANAGER:

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D. BACKGROUND:

The 1996 Amendments to the Safe Drinking Water Act (SDWA) requires the U.S. Environmental Protection Agency (EPA) to review its existing drinking water regulations every six years. Section 1412(b)(9) of the SDWA states "The administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation promulgated under this title. Any revision of a national primary drinking water regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons."

Since the 1996 SDWA Amendments were enacted, EPA has completed two comprehensive reviews of existing National Primary Drinking Water Regulations: Six-Year Review 1 (completed in July 2003) and Six-Year Review 2 (completed in March 2010). Under Six-Year Review 1, the

Agency reviewed 69 National Primary Drinking Water Regulations (NPDWRs), which included 68 chemical NPDWRs and the Total Coliform Rule. Based on its preliminary review, public comments, and other information, the Agency concluded to revise the Total Coliform Rule, but not to revise the 68 chemical NPDWRs.

Six-Year Review 1 was conducted according to the June 2003 “EPA Protocol for the Review of Existing National Primary Drinking Water Regulations” (EPA 815-R-03-002). The protocol was developed by a workgroup, with representatives from EPA’s Office of Ground Water and Drinking Water (OGWDW), the Office of Science and Technology, the Office of General Counsel, the Office of Pesticide Programs, the Office of Research and Development, the Office of Policy, Economics and Innovation, the Office of Solid Waste and Emergency Response, and EPA Regions I, V, VII, IX, and X. Workgroup members provided technical guidance throughout. The National Drinking Water Advisory Council (NDWAC) and many stakeholders provided valuable advice to improve the review process and this document. The Cadmus Group, Inc., served as the prime contractor for developing this document.

Under Six-Year Review 2, the Agency reviewed 71 NPDWRs and identified four chemical NPDWRs for revision (acrylamide, epichlorohydrin, tetrachloroethylene, and trichloroethylene). Six-Year Review 2 was conducted according to the October 2009 “EPA Protocol for the Second Review of Existing National Primary Drinking Water Regulations (Updated)” (EPA 815-B-09-002). Although the updated protocol notes that the protocol included only “minor refinements,” it nearly doubled in length, primarily due to an expanded decision tree, with detailed diagrams for each of its branches, including six that were not part of Six-Year Review 1 (health effects and Maximum Contaminant Level Goal (MCLG), Maximum Contaminant Level (MCL), treatment technique, analytical methods, occurrence and exposure, and treatment feasibility).

Under this work assignment, EPA is seeking continued support, as a follow-on to work assignment O-16, for its effort pertaining to the Microbial and Disinfectant By-Product (MDBP) rules that EPA expects to review during the third Six-Year Review (SY3). The MDBP rules address several regulations such as the Surface Water Treatment Rule (SWTR), Interim Enhanced Surface Water Treatment Rule (IESWTR), Long Term 1 Enhanced Surface Water Treatment Rule (LT1), Filter Backwash Recycling Rule (FBRR), Long Term 2 Enhanced Surface Water Treatment Rule (LT2), Groundwater Rule (GWR), Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR), and Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR). In total, these rules address 14 National Primary Drinking Water Regulations, including microbial contaminants/indicators (such as giardia lamblia, viruses, legionella, cryptosporidium, heterotrophic plate count (HPC), and turbidity), disinfection byproducts/indicators (such as trihalomethanes (THMs), haloacetic acids (HAAs), chlorite, and bromate), and disinfectant residuals (such as chlorine, chloramine, and chlorine dioxide).

EPA published the National Primary Drinking Water Regulations for Stage 2 DBPR on January 4, 2006 (71 FR 388). That rule was intended to reduce potential cancer risks and address concerns with potential reproductive and developmental risks from disinfection byproducts (DBPs). It covered information such as applicability, requirements, compliance monitoring, and public

health concerns. LT2 was finalized and implemented simultaneously with the Stage 2 DBPR to ensure that drinking water is microbiologically safe at the limits set for DBPs.

More recently, EPA developed a SY3 information collection request (ICR) that seeks to obtain information from the states for compliance monitoring data and treatment technique information for regulated chemical, radiological, and microbiological contaminants. This request addressed those contaminants that were previously addressed in the second Six-Year Review, as well as for the following rules not included in SY2: GWR, SWTRs, DBPRs, and FBRR.

As part of the SY3 process for the MDBP rules, EPA will assess and analyze new data/information regarding health effects, epidemiology, occurrence, treatment, and other risk mitigation measures, analytical methods, and risk from all relevant contaminants to evaluate whether there are new or additional ways to estimate and manage risk that will maintain or strengthen public health protection. Some of the new data/information will be based on the results from a literature review matrix, which was compiled by Cadmus under WA 5-36 (Contract EP-C-07-022). Potential outputs from the SY3 review will include summary documents on health effects, occurrence, treatment, and implementation. In performing the tasks identified below, Cadmus shall indicate how each product may be incorporated into the SY3 outputs.

The primary tasks to be conducted under this WA include the following:

- **Task 0:** Project Management
- **Task 1:** Weight of Evidence Analysis for Risks from DBPs
- **Task 2:** Preliminary Considerations of Unintended Consequences
- **Task 3:** Administrative, Analytical, Writing Support
- **Task 4:** Support for Methods, Occurrence, Public Health, and Treatment Techniques for Ground Water and Surface Water Treatment Rules
- **Task 5:** Identify Relevant Information Sources for Six-Year Review of MDBP Rules

E. QUALITY ASSURANCE:

Tasks 1, 2, 4 and 5 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed for Tasks 1, 2 and 4 under Base Period Work Assignment 0-16. If the quality assurance processes for these tasks are identical to that applied to under Work Assignment 0-16, no amended SQAPP is required. However, if the quality assurance processes for these tasks is different from the ones previously approved, the contractor shall submit an amended SQAPP and shall not proceed with any work until EPA approves the Plan. The project specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

F. TASK DESCRIPTION:

Task 0: Work Plan and Monthly Progress Reports

The Contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the Contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the Contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-16. The work plan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under task 0 of WA 0-16.

The work plan shall explain when the SQAPP will be submitted based on the specific data requirements of the WA. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the Project Officer and WAM if any change to the tasks involving the collection and analysis of data occurs and shall prepare a new SQAPP. Work on new task cannot proceed until the contractor receives notification of the new approval from the EPA Project Officer.

Deliverables:

- Work plan
- Supplemental Quality Assurance Project Plan
- Monthly progress and financial reports

Task 1: Weight of Evidence Analysis for Risks from DBPs

The purpose for this task is to continue the effort to evaluate the weight of evidence on the extent to which our understanding of risks from DBPs have changed since the 1999-2000 FACA and since the promulgation of the Stage 2 DBPR rule, and whether the data could support a basis for revising or developing new MCLGs for DBPs. This task consists of three

subtasks, as described below following a brief summary of data sources. Some of the work on these subtasks was begun under WA 0-16. Under this work assignment, the contractor shall complete the work on these subtasks that was not performed under WA 0-16.

There are a number of **data sources** that are available to support this weight of evidence analysis, including the following:

A. Historical and cancer epidemiological (epi) studies since the 1999-2000 FACA deliberations

1. Bladder cancer

- The Economic Analysis (EA) for the Stage 2 DBPR includes characterization of all epi studies considered through 2004. Approximately 15% of bladder cancer cases in US (i.e., $\sim 0.15 \times 60,000 = 9,000$ per year) may be attributed to chlorinated drinking water, based on a meta-analysis of case control bladder cancer studies in US and Europe (Villanueva et al 2003, 2004). The EA includes estimates of annual bladder cancer cases avoided from Stage 2 DBPR.

- New epi studies (Cantor et al 2010, Kogevinas et al, 2010, Font-Riber et al 2010, Richardson et al 2010, Pegram et al 1997, Villanueva et al 2007) suggest that populations with specific genotypes (could be $\sim 25\%$ of US population) may be vulnerable to bladder cancer from DBPs in drinking water (DW). Much of the drinking water-related bladder cancer risk may be attributed to dermal and inhalation exposure. THMs containing bromide may be implicated as a significant indicator of risk. A National Institutes of Health (NIH) study in New England that is underway and nearing completion will further inform the genetically-susceptible population risk to bladder cancer concern from chlorination DBPs.

2. Colorectal cancer

- The EA for Stage 2 DBPR includes characterization of all epi studies considered through 2004 for colorectal cancer. These studies provide some evidence of a link between DBPs and colorectal cancer, but the evidence is not as compelling as for bladder cancer. Limitations in exposure assessments have contributed to potential misclassification and inconsistencies.

- Additional on-going studies may help to inform this possible association (e.g., Villanueva et al. are currently conducting an epi study to evaluate risk to populations with specific genotypes). Additional studies should indicate if similar effects are observed for the genetically-susceptible populations that were found to be at risk for bladder cancer.

3. Other cancers

- The EA for Stage 2 DBPR includes characterization of all epi studies considered through 2004.

B. Historical and developmental/reproductive epidemiology studies since the 1999 -2000 FACA deliberations

- The preamble to the Stage 2 DBPR includes a summary of 40 studies through 2005 (approximately half were published since 1999/2000 FACA). In addition, there have been a substantial number of studies published since 2005.

C. Toxicology studies, including the following types of information:

1. Studies considered in developing the Stage 1 and Stage 2 DBPRs, and whether there are any new interpretations of this information.
2. New toxicology data (e.g., bioassays for bromochloroacetic acid and dibromoacetic acid by NTP).
3. Studies published in literature (in-vivo studies and in-vitro studies, e.g., cytotoxicity and genotoxicity studies by Plewa et al).
4. Mixtures studies

- EPA's 4-lab study covers developmental reproductive outcomes, and how it compares with data from epi studies; new studies underway by an ORD research team to determine relative toxicity between chlorinated and chloraminated waters for different endpoints; new studies will need to inform comparative bladder and colon carcinogenicity from chlorinated versus chloraminated waters.

- Historical studies comparing mutagenicity of water treated with chlorine, chloramines, chlorine dioxide, and ozone.

Subtask 1. 1 – Weight of Evidence Evaluation for Cancer Risks from DBPs

The contractor shall evaluate historical and cancer epidemiological studies since the 1999-2000 FACA deliberations that will inform the public health risk from DBPs, as well as the risk mitigation provided. These data and information will include, but not be limited to, the data for bladder cancer, colorectal cancer, and other cancers as discussed above. The data shall be analyzed to evaluate the weight of evidence on the extent to which risks from D/DBPs have changed since the 1999 to 2000 FACA, and whether the data could support the basis for revising or developing new MCLGs for DBPs, such as for 2 of the 4 unregulated HAAs - bromochloroacetic acid and dibromochloroacetic acid; a potential MCL for HAA9 (including an evaluation with the occurrence data for HAA9 from the 1997-98 ICR and research studies).

A report, no longer than approximately 20 double-spaced pages, shall be prepared to include all the data evaluated and considered under this sub-task. The paper shall separately examine the extent to which our understanding of risks from DBPs have changed since the 1999-2000 FACA (as characterized in the Stage 2 EA) and since promulgation of Stage 2 (for example, Part 1 – information from 2000 to 2006; Part 2 – information from 2006 to present). The paper shall examine a variety of topics related to weight of evidence, such as routes of exposure, genetic markers, causative factors, and unintended consequences. It should also identify potential next steps for evaluation. It is to be delivered in electronic MS Word format, with a final report delivered in both electronic MS Word format and as a PDF.

Subtask 1.2 – MCLG Evaluation for Mixtures of Chlorinated DBPs

The contractor shall evaluate whether data could support the basis for a possible MCLG for mixtures of chlorinated DBPs. This would be related to the Agency's group contaminant regulatory approach, but would use a treatment technique and/or MCL approach to address. In this subtask, the contractor shall evaluate the overall weight of evidence from epidemiological and toxicological studies, which should be further informed by data from new epidemiological studies.

This subtask will also consider the following:

- The post-Stage 2 DBPR bladder cancer risk as informed by most recent epi studies. The contractor will refine/qualify estimates from the EA; give consideration of risk to genetically-susceptible populations per Cantor et al 2011; and characterize how much of this risk might pertain to TTHM/HAA5 vs. other DBPs.
- Evaluate overall weight of evidence of DBP toxicology studies, covering existing and new cancer potency factors for regulated and unregulated DBPs (e.g., bromochloroacetic acid, dibromochloroacetic acid, dibromoacetonitrile based on NTP studies); toxicity indicator data for different groups of DBPs (e.g., in vivo and in vitro data); and organize data by hierarchy of quality (e.g., for carcinogens, ranging from two year bioassay data to in-vitro data).
- Evaluate occurrence data to inform frequency and magnitude of DBP occurrence. This will address the ubiquitous occurrence of many DBPs known and unknown that cannot be practically measured as an aggregate; provide a linkage to epi studies and limitations of the current TTHM/HAA5 indicator system; and evaluate how much of the cancer risk suggested by epi-studies might be explained or indicated by non-TTHM HAA5 data, or DBP occurrence not correlating with TTHMs or HAA5. The context of this overall MCLG evaluation would be to inform basis for a possible new treatment technique requirement and/or MCLs to enhance protection from DBPs (e.g., evaluating possible increased stringency to existing TOC removal requirements (DBP precursors) under Stage 1 DBPR).

A report, no longer than approximately 20 double-spaced pages, shall be prepared to include all the data evaluated and considered under this sub-task. The paper will examine a variety of topics related to weight of evidence, such as routes of exposure, causative factors, and unintended consequences. It should also identify potential next steps for evaluation. The paper is to be delivered in electronic MS Word format, with a final report delivered in both electronic MS Word format and as a PDF.

Subtask 1.3 – Weight of Evidence Evaluation for Developmental/Reproductive Effects

The contractor shall evaluate the weight of evidence for developmental and reproductive effects from all available epi studies. This will include the extent to which the perception of risk has changed in the scientific community since (a) the 1999-2000 FACA, and (b) promulgation of Stage 2 DBPR rule. This will also include the following:

- Evaluate to determine if there are any consistent associations for wide range of outcomes including spontaneous abortion, stillbirth, birth defects, preterm birth, and reduced birth weight, recognizing the limitations in exposure assessments that have contributed to potential misclassification and inconsistencies.
- Evaluate whether overall data emerging indicate any significant risk that might warrant regulation (e.g., to what extent does data suggest increased risk from small for gestational age (SGA)), and what are the potential health risk implications from such a finding.
- Evaluate the more recent studies that will have improved exposure assessments to better inform potential risk.

A report, no longer than approximately 20 double-spaced pages, shall be prepared to include all the data evaluated and considered under this sub-task. The paper will examine a variety of topics related to weight of evidence, such as routes of exposure, causative factors, and unintended consequences. It should also identify potential next steps for evaluation. It is to be delivered in electronic MS Word format, with a final report delivered in both electronic MS Word format and as a PDF.

Deliverables (by Subtask):

- Draft Outline
- Final Outline
- Draft Report
- Matrix for Addressing EPA Comments
- Final Report

Task 2: Preliminary Considerations of Unintended Consequences

As a follow-up to Task 1, and to complement ongoing activities under WA 1-11, the contractor shall develop a preliminary draft report that examines potential implications for the risk-related tradeoffs that serve as a basis for the MDBP rules (one type of DBPs vs. another, and DBPs vs. microbials). This will evaluate the data and implications informing changes in our understanding for potentially creating or avoiding unintended consequences while remediating above risk, and include cost considerations (these considerations were constraints in limiting the stringency of the Stage 2 DBPR). This task will examine how unintended consequences might be minimized and include a potential approach for conducting additional activities related to this examination. Some of the work on this task was begun under WA 0-16. Under this work assignment, the contractor shall complete the work on this task that was not performed under WA 0-16.

In addition, this report shall provide a brief summary that lists the major data sources available to conduct such activities, and how these data sources might be used. This could include topics such as post-Stage 2 occurrence, small vs large systems, and remedial strategies. It could also include an approach for soliciting input from key stakeholders.

Following a review of the draft report, EPA may determine to further examine one of the following approaches, or an alternate approach:

- Creating new pathways for controlling pathogens which reduce DBP production (for example, by changing the SWTR criteria to allow the absence of a disinfectant residual entering a distribution system (DS) or within a DS), while still achieving the minimum 2/3/4 log removal/inactivation of Crypto/Giardia/viruses and addressing DS protection; or by allowing the absence of disinfectant residual within a DS if the system meets DS control parameters (note: there are no federal requirement for disinfectant residual in GWR). This latter approach could examine low assimilable organic carbon (AOC); absent to very low TC hit rates; storage tank inspection /cleaning; cross-connection control (CCC) program; or pressure controls.
- Using one or more of control measures for the following: TOC, TTHM, HAA5, and/or HAA9. This could involve areas such as method availability; source water quality and treatment conditions affecting these measures.

The final report, not to exceed approximately 20 pages, shall be prepared to include all the data evaluated and considered under this task. It is to be delivered in electronic MS Word format, with a final report delivered in both electronic MS Word format and as a PDF.

Deliverables:

- Draft Outline
- Final Outline
- Draft Report
- Matrix for Addressing EPA Comments
- Final Report

Task 3: Provide Administrative, Analytical, Writing Support

As directed by the WAM, the Contractor shall provide administrative, analytical, and writing support to help EPA fulfill its obligations regarding consultations, outreach, options selection, and other tasks as determined by EPA. The Contractor shall provide general support as identified by EPA including: developing fact sheets, presentation materials and visual aids, communication materials, and support documents; providing technical and copy editing services; supporting EPA docket management activities; and conducting literature searches and telephone inquiries. Technical and copy editing includes reviewing documents for technical accuracy, responding to all comments received from EPA (by incorporating changes into the document, or explaining why no action was taken), and ensuring consistency throughout documents.

EPA projects that **approximately 10% of the total LOE** will be required to complete this task.

Deliverables:

- Consultation and outreach fact sheets, presentation materials and visual aids, communication materials, and support documents and analyses (estimated total of 4-7), as directed by the WAM
- Additional interim (revised) drafts of any of the above documents, as directed by the WAM
- Technical and copy editing reviews of documents, as identified by EPA
- Up to two literature search summaries, as identified by EPA

Task 4: Support for Methods, Occurrence, Public Health, and Treatment Techniques for Ground Water and Surface Water Treatment Rules

As directed by the WAM, the contractor shall review available literature and perform analyses to support the review of one or more technical and policy issues associated with one or more of the following rules: GWR, SWTR, IESWTR, LT1, and LT2), including new data and information that have become available since the promulgation of those rules. Specific direction for review and analyses will be provided by the WAM. Potential topics might address issues such as use of specific treatment techniques to protect drinking water consumers, and issues related to EPA's guidance for determining PWS systems that are noted as groundwater under the direct influence of surface water (GWUDI).

EPA projects that **approximately 10% of the total LOE** will be required to complete this task.

Deliverables:

As directed by the WAM,

- Draft Outline
- Final Outline
- Draft Report
- Matrix for Addressing EPA Comments
- Final Report

Task 5: Identify Relevant Information Sources for Six-Year Review of MDBP Rules

This task is a continuation of work that was begun under Work Assignment 5-36. The contractor shall continue to identify new relevant information for the SY review of MDBP rules. As new information is identified, the contractor shall update the database of information sources, identifying data limitations and needs, highlighting and addressing data quality issues,

and providing an assessment of data quality and quantity. For the purpose of the cost estimate, the contractor should assume that they will provide an updated database twice during the year, following the addition of new relevant information.

Deliverables:

As directed by the WAM,

- Updated database of relevant information

G. SCHEDULE OF DELIVERABLES:

The Contractor will develop and deliver all documents and/or deliverables related to the MDBP review process (e.g., materials developed by the Contractor, EPA, or non-EPA stakeholders) in Microsoft Office and/or PDF format and will comply with **EPA's 508 compliance and metadata requirements** for posting on the Internet.

Task	Deliverable	Due to EPA	No. of Copies/Medium
0	Workplan, schedule, staffing plan and LOE estimates for each task	In accordance with contract requirements	In accordance with contract requirements
0	Monthly progress and financial reports	In accordance with contract requirements	In accordance with contract requirements
0	Weekly or Biweekly telephone or email status reports	Weekly/Biweekly each month; starting on the first week of the WA	1 electronic copy, as applicable to the EPA WAM
1	Draft Outline (one for each of three sub tasks)	Within 1 week of holding kickoff meeting/call from the EPA WAM	Electronic copies (MS Word) as requested by WAM
1	Final Outline (one for each of three sub tasks)	Within 1 week of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
1	Draft Report (one for each of three sub tasks)	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
1	Matrix for Addressing Comments (one for each of three sub tasks)	Within 1 week of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by

			WAM
1	Final Report (one for each of three sub tasks)	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies MS Word and PDF versions and electronic Section 508 compliant version as directed by the WAM
2	Draft Report Outline	Within 1 week of TD from the EPA WAM	Electronic copies (MS Word) as requested by WAM
2	Final Report Outline	Within 1 week of EPA providing comments to the Contractor	Electronic MS Word version as directed by WAM
2	Draft Report	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
2	Matrix for Addressing Comments	Within 1 week of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
2	Final Report	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word and PDF versions and electronic Section 508 compliant version as directed by the WAM)
3	Consultation and outreach fact sheets – draft	Within 10 business days of EPA identifying specific content	Electronic/hard copies as requested by the WAM
3	Revised draft versions of consultation and outreach fact sheets	Within 5 business days of EPA providing comments on the initial draft(s)	Electronic copies as requested by the WAM
3	Presentation materials and visual aids (4-7 total) – draft	Within 10 business days of EPA directing the Contractor to start working on the presentation(s)	Electronic/hard copies as requested by the WAM

3	Revised draft versions of presentation materials and visual aids	Within 5 business days of EPA providing directing the Contractor to start working on the presentation(s)	Electronic copies as requested by the WAM
3	Communications materials – draft	Within 10 business days of EPA directing the Contractor to start working on the presentation(s)	Electronic/hard copies as requested by the WAM
3	Revised draft versions of communications materials	Within 5 business days of EPA providing directing the Contractor to start working on the presentation(s)	Electronic copies as requested by the WAM
3	Support documents and analyses (estimated total of 4-7) – draft	Within 10 business days of EPA directing the Contractor to start working on the analysis	Electronic copies as requested by the WAM
3	Revised draft support documents and analyses (estimated total of 4-7)	Within 5 business days of EPA providing feedback to the Contractor on the document	Electronic copies as requested by the WAM
3	Technical and copy editing reviews of documents	Within 5 business days of EPA directing Contractor	Electronic copies as requested by the WAM
3	Literature search summaries	Within 5 business days of EPA directing Contractor	Electronic copies as requested by the WAM
4	Draft Report Outline	Within 1 week of TD from the EPA WAM	Electronic copies (MS Word) as requested by WAM
4	Final Report Outline	Within 1 week of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
4	Draft Report	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by WAM
4	Matrix for Addressing Comments	Within 1 week of EPA providing comments to the Contractor	Electronic copies (MS Word) as requested by

			WAM
4	Final Report	Within 3 weeks of EPA providing comments to the Contractor	Electronic copies (MS Word and PDF versions and electronic Section 508 compliant version as directed by the WAM)
5	Database of Relevant Information Sources (two deliveries during the year)	Within 1 week of TD from the EPA	Electronic copies (MS Access)

H. LEVEL OF EFFORT ESTIMATES:

The estimated Level of Effort for this Work Assignment is 2930 hours.

I. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS:

The Contractor shall immediately notify the EPA Contracting Officer, Project Officer and Work Assignment Manager of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$25,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

J. TRAVEL:

Only local travel is expected from the Contractor to support the work outlined in this work assignment.

K. SPECIAL REPORTING REQUIREMENTS:

The Contractor shall provide status updates for each task on a weekly or bi-weekly basis, either through a meeting with the EPA WAM or over the telephone or email.

L. QUALITY ASSURANCE SURVEILLANCE PLAN:

Per Contract requirements